APPLYING INTEGRATED LEARNING MULTIMEDIA SUPPORT TO IMPROVE STUDENTS' SELF MOTIVATED LEARNING IN ELEMENTARY TEACHER EDUCATION DEPARTMENT OF YOGYAKARTA STATE UNIVERSITY

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Abstract

This research is aimed at increasing students' self motivated learning in Elementary Teacher Education Program of Yogyakarta State University by using multimedia in lectures on Integrated Learning.

The researcher applies the method of classroom action research conducted in two cycles. The subjects of the research are 40 students from class VI B of Elementary Teacher Education Department. The data are collected by using questionairres, observation, documentation, and interview. Furthermore, those data are analyzed under descriptive quantitative analysis technique.

The result of this study shows that using multimedia in lectures on Integrated Learning can improve student's self motivated learning up to 91,4%, which influences the students's ability in applying independent learning 34,3% in the first cycle and 57,1 % in the second cycle.

Keywords: Self Motivated Learning, Multimedia, Integrated Learning

Introduction

Current global challenge demands each individual to improve academic capacity and skill, as well as the other non-academical capabilities in order to survive and win the life competition. This condition evokes some changes in learning paradigm. The learning process should be able to develop the student's capability but it must not be handicapped by system and all sort of limited facility support matter. Fortunately, today's learning grows along with the oportunity for students to utilize various type of learning resources which allow them to learn independently. Those resources may primarily consist of both text and digital book, and also computer-based learning media.

Elementary Teacher Education Department, which is designed to be the institution where the candidates of professional elementary school teachers are born, is expected to be able to supply post-graduate students who are capable of:

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(a) facilitating the development of strong and smart characters of elementary students; (b) conducting the tasks of elementary literacy learning process as a tool to master science and technology; and also (c) developing and improving their professional and academic skill as teachers creatively, productively, and independently towards informational system so they can always perform ultimate dedications. Based on those goals, it is inevitable to create a learning environment where students can explore their potential capabilities, especially when they apply it later in real practical teaching-learning process.

Within the Elementary Teacher Education curriculum there is an integrated element included in Integrated Learning subject. Actually, the learning principles are conceptually included in each lecture. The position of Integrated Lerning within the curriculum of Elementary Teacher Education Department becomes the culminative point of the former subject principles as the media of practicing which comprehensively portrays the real elementary school situation (Tim Pengembang PGSD,1996: 3).

This two-credit-subject belongs to pedagogical competence. The targets are student's ability in understanding, planning, and applying integrated learning models to support two other subjects that will be taken in the next semesters, i.e. *Praktik Perkuliahan Lapangan (PPL* or teaching training*)* and *Kuliah Kerja Nyata (KKN* or field work practice*)* held in the real elementary schools.

The great quantity of materials which have to be learned by the students are not proportional especially when being compared with the semester credit. As a matter of fact, the problem is similarly coped by all other lecturers who teach Integrated Learning subject. The lecturers find that the lack of the provided time usually remains lots of materials which cannot be delivered so they prefer giving many assignments for student. The implication of this chosen method—i.e. assignments replacing lecture meetings, according to the questionairre distributed by the researcher, 20,9% of the students are less enthutiastic to learn the materials, whereas 35,5% of the students have less self-initiatives to enrich their understanding on integrated learning through other resources given by the lecturers.

The other problem is related to the available resources of Integrated Learning in the library. There are only two text books that can be accessed by the students from the department library. One of them is a year-1994-published text book which implies on the less up-to-date examples. For instance, the presented example of lesson plan in the book does not fit the direction of current national curriculum, *Kurikulum Tingkat Satuan Pendidikan* (*KTSP* or school-based curriculum). Another text book is just a handout arranged by one of the lecturer who teach Integrated Learning. Hence, student's motivation in enriching the materials then appear in a very poor level.

Independent learning is one of human innate ability. This basic abilty can be interferred due to traditional method of formal education, which is usually teacher-centered. The process of potential skill gaining can be done through incorporating learning strategies, various learning resources, which allow students to be more actively involved in the learning process. Furthermore, such a chain of impact, student's active involvement can significantly increase the learning happiness,learning motivation, and last but not least, learning result. The improvement in learning result, again, will grow the learning happiness to maintain learning continuance. Finally, the whole process of learning can be a virtuous exercise for student's capability in learning independently. (Mujiman: 2009)

Thus, the use of multimedia becomes an alternative for students especially in term of expanding their choices of knowledge resource access in Integrated Learning. It is because the multimedia has included all pengayaan materials, video, and animation so students can be more motivated to study and more independent in learning.

Research Method

This research focuses on class situation which is terminologically known as Classroom Action Research. The subjects are 6th semester students in Elementary Teacher Teacher Education Department of Educational Science Faculty of Yogyakarta State University. This research begins with observation

towards student's learning initiative which shows the poor level, then turns to classroom treatment by using integrated learning multimedias in two cycles.

The data are quantitative, taken from the questionairres on student's ability in learning independently and student's self motivated learning. Teacher's observation applies integrated learning multimedias. Meanwhile, the questionairres which are developed to figure out student's ability in learning independently include 3 criteria, mainly the ability in developing self learning motivation, technical ability in learning, and also the ability to make self reflection. Those criteria are eventually divided into 10 questions.

The data analysis is conducted along with the learning process, and from the questionairres on student's ability in learning independently. In each cycle, evaluation and reflection are provided before moving on the preparation of the upcoming cycle. Then in the second cycle similar process of data analysis is applied. If the result is not satisfying yet, the researcher will prepare another new cycle. However, if the second cycle result is considered sufficient, an additional cycle is no longer needed.

Findings and Discussion

Before moving on the treatment, the researcher analyzes all appearing problems. Initial observation is conducted as the way to test whether the problems under analysis are real problems and urgent to be solved immediately. The most prominent problem is that student's ability in learning independently only reaches 35,5% of all in searching any sources of information instead of those given by the lecturer. Along with this, according to the pre-interview, students study only for the sake of exam or assignments. It means that student's advanced commitment to understand and analyze the materials independently is in very low degree.

Beside the initial observation, the researcher also prepares some planning, i.e. lesson plan, to make the implementation of the treatment easier. The lesson plan includes: the standar competence target, both lesson objectives and their indicators, particular teaching-learning approaches, topics, the chosen method or

strategies to enhance effective learning,and also the utilized medias and learning resources which aim to reach learning objectives, i.e. learning multimedias.

The first cycle

a. The implementation of Treatment in the First Cycle

Meeting	Treatments	Field note
1	Students use multimedias in laboratory of computer, by reading the basic materials of integrated learning concept. The lecturer asks some questions and assignments for students to read the next chapter.	The students respond enthustiastically because it is the first time they learn by using multimedias.
2	Students learn about some models of integrated learning using multimedias.	Some of the students are less enthusiastic.
3	Students make lesson plan for one of integrated learning model based on examples presented in the multimedia.	For some students the topics still seem unclear although they did not ask previously.
4	Analyzing lesson plan and giving quiz to check the students' understanding whether or not well-internalized by all of the students.	Most of the students cannot answer questions in the quiz.

b. Observation and the result of the observation

After the observation of the first cycle is accomplished, the researcher finds that: According to the result of observation towards the first cycle of classroom research, it can be inferred that the students' independence level in learning is quite low. Nevertheless, the students have good motivation. This can be percieved from the following indicator table:

No	Item	Procentage (%)		
		Never	seldom	often
1	Making time for reading the CD	34	60	5,7
2	Being enthusiastic to read the CD	11,4	68,6	20

3	Having regular schedule for reflection	45,7	42,9	11,4
4	Making the schedule to study	20	57,1	22,9
5	Going to the *warnet* to search for literatures	2,9	48,6	48,6
6	Having discussion with friends oftenly.	0	51,4	48,6
7	Asking questions to the lecturer	68,6	28,6	2,9
8	Actively searching for help whenever finding problems in learning	0	25,7	74,3
9	Reading the CD if there will be a lecture	25,7	37,1	37,1
10	Using the CD as the only reference	80	20	0

Self motivation is closely related to student's independence in learning. Thus, in this case the researcher attempts to portray how learning motivation can be seen from the following indicator:

No	Item	Procentage (%)		
		No	Seldom	Yes
1	Getting score is my self obsession	0	8,6	91,4
2	It is important for me to learn all subjects.	2,9	11,4	85,7
3	The most important thing for me is getting high cummulative index.	5,7	37,1	57,1
4	I am interested in the material of a subject.	2,9	91,4	5,7
5	Having my CD-reading done satisfies me.	25,7	57,1	17,1
6	Integrated Learning materials are beneficial for me.	0	5,7	94,3
7	I spend lots of time to study.	2,9	91,4	5,7
8	The most important thing for me is the knowledge itself, not the score.	0	20	80

In this first cycle, the result generally shows that students with middle level ability in learning independently reach 65,7% of all whereas those who have high-level of ability reach 34,3% of all.

c. **Reflection and Treatments**

After the first cycle of this action research is accomplished, the next stage is reflection. Reflection steps are conducted by thinking and reflecting all occuring things during the treatments. It can be done by comparing the state before and after the treatments are given to the students. The point of reflection is whether the students' self motivated learning and independence improve or not. The researcher also attempts to reflect whether there are any improvements of student's ability in learning independently due to the use of multimedia in the teaching-learning process.

According to the reflection stage, there are some points which can be inferred from the treatments during the first cycle. Those are related to the indicator of treatment success. The criteria are used to consider and give meaningful interpretation of all stages taken during treatments. Based on the determined research criteria, the researcher finds out the following results.

According to the research result mentioned above, it can be identified that students do not use multimedias optimally yet. As an effect, they do not really understand the taught materials. Some problems are due to their unreadiness in facing a change from campus-based study to home-based study using multimedias which, of course, requires longer time to spend because they have to turn on the computer fisrt.

The other problem emerges because in the first cycle the lecturer have put the multimedias only as a primary source and not applied various teaching strategies yet. For example, the lecturer applies teacher-centered exploration, even in questions and answers, which still dominates within lecturing activities. This evokes students' less enthusiasm towards the lesson.

The Second Cycle

    a. Treatments in the Second Cycle

Meeting	Treatments	Field note
1	Students analyze the video of practicing temathic teaching-learning	Students are interested and enthusiastic.

		on multimedia.	
	2	Integrated learning simulation.	Class situation becomes more alive.
	3	Integrated learning simulation.	Class situation becomes more alive.
	4	The simple competition on student's comprehension about integrated learning materials.	Most of the students understand the learned materials.

b. Observation and the Result of the observation

According to the observation result in all treatments during the second cycle, it can be concluded that students, in average, are in increasing level of the ability in learning independently, i.e. students with middle-level of the ability which reach 42,9% of all and those who are in high level reaches 57,1% of all

No	Item	Procentage (%)		
		Never	Seldom	Often
1	Making time for reading the CD	22,9	65,7	11,4
2	Being enthusiastic to read the CD	20	65,7	14,3
3	Having regular schedule for reflection	5,7	94,3	0
4	Making the schedule to study	31,4	51,4	17,1
5	Going to the *warnet* to search for literatures	8,6	31,4	60
6	Having discussion with friends oftenly.	2,9	57,1	40
7	Asking questions to the lecturer	60	28,6	5,7
8	Actively searching for help whenever finding problems in learning	0	25,7	74,3
9	Reading the CD if there will be a lecture	11,4	45,7	42,9
10	Using the CD as the only reference	68,6	11,4	20

c. Reflections on treatments during the second cycle

Similarly with the previous cycle, reflection is applied soon after all treatments are accomplished in this second cycle. According to the determined attainment criteria, it can be inferred that in the action research during this second cycle:

1) There are increasing points of students' enthusiasm in reading, students' reading motivation, and students' attempts to ask questions to the lecturers whenever finding difficulties.

2) Students' ability in learning independently raises from 34,3 % up to 57,1 %.

3) The average student's score based on the competence in implementing integrated learning models is 75.

According to the result above, the two criteria which is applied to determine the success of the treatments are already fullfiled.

Discussion

This action research is conducted in two cycles which is held in 8 meetings totally. Each cycle spends 4 meetings. The following discussion is about some matters related to the impementation of using integrated learning multimedias to improve students' ability in learning independently in Elementary Teacher Education Department of Yogyakarta State University.

1. Student;s learning motivation

   Learning motivation is a prerequisite for student's independent learning. It can be divided into two types of motivation, mainly intrinsic motivation and extrinsic motivation. In the instrument given to the students, intrinsic motivation involves the question of student's need and interest towards learning materials. Meanwhile, extrinsic motivation involves the question whether using multimedia motivates them to fulfill their need and interest towards the lesson. Both the first and the second question shows that their learning motivation is high, i.e. 91,4%.

   Besides, the result of the interview conducted by the researcher shows that high scores and great cummulative index ar important things to achieve by students. As AW says, "it satisfies me whenever I get a good score, and ofcourse, I will always effort for it". The next question is whether the motivation of the students are only for the sake of mark or not. Related to this question, most students, think that the knowledge itself is as

imortant as the score. Like what UK answers to respond the researcher's question, "We must master all skills and knowledge because what we are attempting is about becoming teachers. Our high score is a logical indicator of our good efforts". The influencing external factor is due to the fact that this subject will be student's provision before PPL in the next semester, especially when teaching in low grades of elementary school so the competence will be relevant.

The using of multimedia as a learning resource can enrich references they need. As being said by NT, " this multimedia is amazing, because I am much helped by the video, animation and pictures". ST similarly comments, "Although the language is less communicative, this new method is great".

2. Student's ability in learning independently

Self ability in learning independently includes:

(1) the ability to develop self-learning motivation. Related to this, procentage of students from this action research shows a high level.

(2) the ability of technical learning to achieve learning objectives of particular competence. According to the questionairres, students' ability in learning independently reaches 57,1%. This procentage is not satisfying yet because when referring to the item of why they are enthusiastic and motivated, the lecturer still influences much, especially by giving assignments for students. As BW says, " I study only if there is an assignment. In general I rarely make time for opening the multimedia". It is similarly said by PW, " I have many other assignments, Maam, not only in this subject".

The comparation between student's ability in learning independently of the first and the second cycle can be seen in the following table.

No	Item	Cycle 1			Cycle 2		
		Never	Seldom	Often	Never	Seldom	Often
1	Making time for reading the CD	22,9	65,7	11,4	22,9	65,7	11,4

2	Being enthusiastic to read the CD	20	65,7	14,3	20	65,7	14,3
3	Having regular schedule for reflection	5,7	94,3	0	5,7	94,3	0
4	Making the schedule to study	31,4	51,4	17,1	31,4	51,4	17,1
5	Going to the *warnet* to search for literatures	8,6	31,4	60	8,6	31,4	60
6	Having discussion with friends oftenly.	2,9	57,1	40	2,9	57,1	40
7	Asking questions to the lecturer	60	28,6	5,7	60	28,6	5,7
8	Actively searching for help whenever finding problems in learning	0	25,7	74,3	0	25,7	74,3
9	Reading the CD if there will be a lecture	11,4	45,7	42,9	11,4	45,7	42,9
10	Using the CD as the only reference	68,6	11,4	20	68,6	11,4	20

(3) the ability to reflect requires the other abilities, i.e. (a) the ability to accept mistake as a usual thing, (b) the ability to transform mistake into a valuable input to avoid the similar mistake, and (c) the ability to achieve a succes not merely as a pride. According to the questionairre, 94,3% students seldom apply reflection activity. When being confirmed why they rarely reflect the lecture activities, most of them point the crowded schedule of lectures in the semester as the main cause. As being told by WP, "During this semester my days are fully schedulled by lectures, moreover we also have Microteaching subject which spends lots of our time".

3. Students' learning result

Students' learning result shown in this paper is not a result of pre- or post-test. It is just the students' final exam score because the end of this action research meets the time of sinal semester examination. The result shows that the average mark is B and minimum required mark has been fulfilled.

Conclusion

According to the research, the researcher concludes that:

1. Through the implementation of integrated learning multimedia, the result of student's self motivated learning is 91,4%, while student's ability in learning independently raises from 34,3 % to 57,1 %.

2. The lecturer's role dominantly influences student's independent learning as an external factor, e.g. students study hard only if there is assignment from the lecturer.

3. The more student's independent learning ability increases, the higher mark of student's final result is achieved. In this case, after the research the average mark of the student is B.

Suggestion

Related to the conclusion in the previous section, there are some suggestions from the researcher about applying multimedia support in Integrated Learning subject. They are as follows:

1. Applying multimedia support is very relevant in Integrated Learning subject because it is a new alternative in lecture.

2. In the implementation, other methods are needed to maintain student's interest.

3. It is necessary to create intensive relationship between the lecturer and the students in order to develop an effective communication during lessons.

4. Condusive classroom situation is primarily required.

5. Reward and punishment are two supporting tools to motivate students in self-reflecting.

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