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Blended Learning Improve Student Learning Outcomes and Sport Achievement of the State Senior High School for Sports Sidoarjo

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ABSTRACT
The State Senior High School for Sports (SMANOR) Sidoarjo is the only high school in East Java that has a special interest in sports achievements. Students in this school are interested for academic success and achievement success. Two things that are contradictory. It means that if academic success is requested, achievement is neglected, in the other hand, if achievement is requested, academics are neglected. There are several reasons for the ineffectiveness of the program, including the lack of synergy between the regular teaching and learning process and the training process programmed by the trainer. Physical fatigue as a result of training causes a lack of concentration in teaching and learning activities. In particular, this research aims to develop innovative learning media that are effective in special class students for sports based on computers and android. This type of research is research and development. The subjects in this study were teachers, students State Sports High School for sport. This study was designed for 3 years. The first year aims to establish a needs analysis and improving teacher competencies in online learning. Meanwhile, the second year aims to develop networking system on computer and android based. The purpose of the third year research is to perfect the blended learning-based learning process design, ccompleting the e-learning module (link with computer and Android), and establishing the manual for the training program. Result this research are: iinitial analysis of the learning process at SMANOR is very ineffective, SMANOR Sidoarjo desperately needs learning innovations that can support academic and non-academic achievements, The blended learning workshop which was held for 4 days has improved the ability of teachers in making electronic books based on computers and androids, Output is produced in the form of an electronic book that is ready to be implemented in the online and offline learning process. Conclusion from this research are SMANOR Sidoarjo really needs learning innovations that can support academic and non academic achievements. The blended learning is the best oppropriate approach implementation in teaching and learning process.

Keywords: *Blended, learning, computer, android*

1. INTRODUCTION

Educational strategies in formal schools that have been taken so far tend to be massive and provide standard / average treatment to all students so that they do not pay attention to differences between students in their skills, interests, and talents. This kind of strategy excellence will appear randomly and is very dependent on the motivation of learners and their learning and teaching environment. Students' skills, interests, and talents are neglected. There is an assessment that learning success can only be seen from academic value alone. On the other hand, actually learning success should be seen from the extent to which teachers can develop superior potential in students. One model of providing education that can be applied to overcome these problems is organizing school of sport (SKO) and specialized sports class in middle school (SMA). With this education delivery model, the quality of the cognitive, affective, and psychomotor domains of students who have special sports talents will continue to develop optimally. In Indonesia, there are 18 sports schools and sports classes. One of them is the State Sports High School (SMANOR) Sidoarjo, East Java.

Along with the development of science and technology, there are 3 approaches that are often used in the learning process in schools, namely: face to face, computerization and the internet (online), and combination (blended learning). All three approaches have both strengths and weaknesses. H acyl learned through blended learning is more effective when compared with full internet learning (online) and also more effective than face-to-face learning (face to face) [1]. Blended learning as an opportunity to integrate an innovative technological advancement through learning the system online (online) with the participation or to-face learning [2]. Blended learning as a combination of media different training (technology, activities, and types of events) to create a training program that is optimal for students who specifically [3].

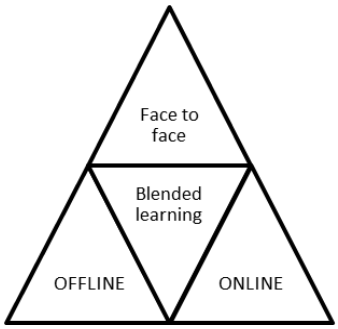

Figure 1. Position of Blended Learning

Blended learning is a combination of face-to-face learning, computer-based learning (offline) and internet-based learning (online) [4]. Learning blended learning approach combines learning with learning technology approach with a combination of learning resources in the face to face with the teachers and the media loaded in the computer, cell phone, iPhone, iPad, android, channel Microsoft satellite, video conferencing , and other electronic media. The main purpose of blended learning is to provide opportunities for students with various characteristics to be able to learn more independently, sustainably, and develop throughout life, so that learning will be more effective and efficient.

The advantages of blended learning-based learning for educational and training institutions are: 1) expanding the reach of learning and training, 2) ease of implementation, 3) cost efficiency, 4) optimal results, 5) adjusting to the needs of learners, 6) increasing attractiveness learner. Some of the special skills needed by teachers in learning with a blended learning approach include: Microsoft Word and Power Point, and Internet skills. The composition of blended learning that is often used is 50: 50, meaning that of the total time available for one particular subject 50% is done face-to-face, and 50% is done online. However, there are also those who apply the proportion of 75: 25, and vice versa, there are those who apply 25: 75. , characteristics and abilities of teachers, available resources, internet network. Blended learning based learning combines' face-to-face learning with e-learning. Blended learning has 6 important elements, namely: 1) face to face, 2) independent learning, 3) applications, 4) tutorials, 5) cooperation, 6) evaluation. In face-to-face learning, the teacher delivers learning content, conducts questions and answers, discussions, provides provides guidance, study assignments, and exams. Face-to-face learning activities are carried out synchronously (synchronous), meaning that the content of the lesson is given and at the same time and place.

2. METHOD

This type of research is research and development with a descriptive approach . This study aims to develop a product in the form of a blended learning network system for students of SMANOR Sidoarjo, and to test the effectiveness of the product (Borg & Gall, 1989). This research took place at SMANOR Sidoarjo. The subject in this study are teachers (N=16), and students (N=162). This study was designed for 3 years. The first year aims to establish a need analysis and improve teacher competencies in online teaching and learning process. The second year aims to develop networking system a computer and android based.

3. RESULT AND DISCUSSION

3. 1 School profile, curriculum, and learning process

SMANOR Sidoarjo is a secondary school owned by the provincial government of East Java. This school focuses on sports. As a public secondary school curriculum used is the regular high school curriculum [8]. Sports in this school are athletics, judo, wrestling, swimming, pencak silat, diving, takraw, karate, rock climbing, and beach volleyball [9]. The number of students are 162 (N=162) with 16 teachers. Number of classes 10, using K13 curriculum, has 4,000 m2 school area, 45.100 electric power, has a Wi-Fi internet network that can reach all areas of the school.

Based on the data above, the results show that the number of teachers and students at SMANOR is relatively small. The proportion of teachers and students is 1: 10. However, when compared with the number of subjects that must be taught, there is a gap because the number of state official teachers is still only 7 people while the subjects that must be taught are 17, so there are 9 honorary teachers. Another gap that has emerged is related to the total number of hours that must be carried out as a professional teacher in order to receive a certified teacher allowance of 24 hours. There are some teachers who have to teach several subjects, and there are also teachers who have to impact teaching in other schools.

The learning process at SMANOR starts at 08.00 to 14.00. There is a schedule of lessons in each class. The attendance rate of students in taking lessons in class is only 55% to 65% for all classes. There are so many students who are not active in class following lessons due to the process of concentrating on training, competing and deliberately skipping school. Based on observations several times at the research

site, the presence of teachers in the classroom is still not optimal. The learning process uses the 2013 curriculum (K13) with learning resources from teacher books and student books.

3.2 Provision of competence

The next step in this research is improving the competence of teachers in blended learning. The training is carried out in 2 stages of training and workshops including:

1. Ncesoft flipbook maker training
   The training was conducted for 1 day at the multimedia laboratory of SMANOR. The training program aims to create computer-based electronic books
2. Screen cast O matic
   This training aims to make a PowerPoint based video. The learning PowerPoint owned by the teacher is not complete. However, after participating in the training the teachers already have the technical ability to make power points that are more interesting and accompanied by teacher visualizations when explaining teaching materials.
3. Sigil
   This program aims to equip teachers to make android-based electronic books. This training is only limited to providing teacher competency only.
4. Google form
   Google form is to equip teachers in compiling and developing evaluation of learning outcomes.
5. Introduction to Google classroom
   Google classroom is a site that teachers can use to accommodate material content that has been generated during training. The Google classroom program requires each teacher to create a Gmail account to be able to enter the program. The use of the Google classroom application is temporary while awaiting the development of the website network that will be implemented at SMANOR.

In the first training stage, the program successfully completed the ncesoft flipbook maker and screen cast O matic with a mastery level of 75% to 80%. The second stage of training begins with a first stage material review process and is continued with the sigil program, Google form and Google classroom. Apart from this, the participants also worked on the task of compiling and developing electronic books. Until this report was compiled most of these tasks had not been completed. However, all participants / teachers have mastered the skills of compiling electronic books up to 80%.

4. CONCLUSIONS AND SUGGESTIONS

4. 1 Conclusion

The learning process at SMANOR is very ineffective from both the teacher and the student side. Based on the Needs Analysis, SMANOR Sidoarjo really needs learning innovations that can support academic and non-academic achievement. The blended learning workshop which was held for 4 days has improved the ability of teachers in making electronic books based on computers and androids.

4.2. Suggestion

1. This research needs to be continued so that it is able to solve learning problems at SMANOR Sidoarjo.
2. Teacher competence in blended learning-based learning needs to be improved

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