



Schoology on physics for reducing learners' anxiety in online testing

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Abstract

The learning is conducted both face-to-face and distance learning. Distance learning supported by online learning. Now, there are many online platforms which are completed by some of features. One of platforms is schoology. The study about schoology in class done. However, the study focused in assessment is rarely done especially on physics. Schoology has some of assessment features such as multiple choice, matching and essay. Each of them has several facilities such as text, equation and picture so it is easy to be used. Facilities can support physics course because physics course needs text, equation and picture to show a question. Online assessment implementation can improve students' technology literacy so that the student will be fun to answer the questions in online test. Besides, students are not anxious when they are answering the questions. In Indonesia, the most of students have been used Computer-Based Test (CBT) on the national examination. It is called the national exam computer-based. Therefore, students need practices in order to believe that they can answering questions test easily. This paper describes contents of schoology and online test through schoology as the tool for reducing students' anxiety on physics course.

Keywords: physics, schoology, technology literacy, online test, anxiety

1. Introduction

For delivering materials, the teacher has many ways both inside and outside of classroom. Materials delivered inside of the classroom called face-to-face, and outside of classroom called distance learning or distance education. Distance learning is education which students and the teacher in same synchronous place or asynchronous through communication supported by instructional technology^[1,2].

Technology that can connect between the teacher and students in a different place is known internet. Almost 20 years, internet has been used widely and it changes contents of many concepts in our life especially the modern communication tools. One of the important concepts and opportunities that available by internet is electronic learning or web-based education^[3]. Other communication supported by internet is sosial network application such as facebook, twitter, forums, blogs, Wikis etc. In education product, the biggest advantages of the improvement using technology take high education sector especially internet. Commonly, the implementation of distance learning on the internet called online learning. It is the general term which prefer to technology-supported learning, rather than similar term such as electronic learning (e-learning), web-based learning, distributed learning and technology-mediated learning^[4]. E-learning gives an opportunity for elsewhere for such learning^[5]. There is e-learning in classroom. It introduces technologies such mobile devices, computers and tablets. Beside, e-learning is required component of online teaching model and blended learning^[6]. The facilities in educational world given by internet are varied. One of them is assessment. Assessment is a live process as well as evidence collection about students' performance and creates feedback mechanism as the means of

learning improvement. On the distance learning, assessment is conducted through e-assessment. E-assessment process involves "assessment scheduling; submission of assignments; tracking of submissions; extension requests and approvals; academic integrity; academic misconduct processes; examinations; marks recording; moderation and external examining".

E-assessment can be conducted with several ways. Some of the study suggested to use different assessment method for constructivistic approach framework which gives positive contribution to their achievement and motivation, and improves their thinking skills. One of them is in physics course which questions are many. There are essay, multiple choices and matching. In traditional assessment method, the development is a few particularly exam of essay and closed book. The teaching and learning have progress in technology. There are many kind of assessment such as objective test. Objective test is the most widespread online assessment and consists of various kinds of test for demanding the role of task by students^[7].

In physics course, the display of question is not only text but also pictures. In addition, questions in physics course need an equation. It makes formula. Generally, there are two or three factors for each question. Therefore, it needs an appropriate platform like physics characteristic. It is schoology.

Some of studies about schoology had been done. Suana (2017) made design of learning media schoology-based blended^[8]. This design is made for several materials on physics basic 1 such as vector quantity, linear motion and translation dynamic. The result showed that content validity aspect and construct indicate "very good" and "good". In addition, it showed that the effectiveness of product can improve

students' conceptual understanding and problem solving skills.

The study of schoology is not only in physics area but also in business. Sicat (2015) examined the effectiveness of Learning Management System (LMS) Schoology to improve expertise of students' college in business writing^[9]. The study conducted both control class and experiment class. The expertise result of subject in business writing can be increased through LMS schoology. The suggestion of this study is LMS schoology as supplement for traditional learning method is used to improve students' expertise college especially business writing.

Schoology takes positive effect toward attitudes^[10]. Moreover, schoology helps students to implement autonomy in EAP class^[11], and it also improves students' abilities in Business Writing^[9]. Schoology has a facility like e-assessment. It can help the teacher to prepare online assessment because most of teachers cannot create by themselves.

Nowadays, the integrated technology and other form of media can be useful in students learning process^[12]. Online test makes students familiar with computer-based test (CBT). It can improve students' skills in answering questions based on computer. Indonesia has implemented CBT for The National Exam Computer Based. In the test, students have a psychology problem one of them is anxiety^[13]. Therefore, students need practices in order to make students familiar with online test. This paper describes content assessment on online test of schoology especially physics course.

2. Social Networking

The last of five years, social networking site has become the famous thing^[14]. It means that it is popular for eleven years since now. Social networking is a network that facilitates social interaction and interpersonal relationship. Specifically, social networking is an application or page which facilitates user to communicate with one another like exchange of thinking way^[15]. To communicate among users, social networking needs a platform. Social networking platforms are something which can allow high interaction among participants, enabling understanding, mutual supporting, and participation in learning activities^[16]. Social networking can emphasize through social service software such as Blog, Wiki, Facebook, Del.icio.us, etc.^[17].

Social networking is not only interrelationship among users but also give priority on building several CoPs (Communities of Practice) so that users can share and exchange information with each other based on their interest. Besides, social networking also allows multimedia interaction which presents pictures, video, link web and so on^[18].

On Education, social networking connects to interaction among teacher and students, and among students. One of social networking that facilitates is schoology. Schoology is a tool based on social network that allows the teacher to communicate with students which is demand both technology needs and curricular elements^[14]. Schoology is easy to use because schoology has design like facebook.

3. Anxiety

The anxiety can occur to whoever. One of them is students

who confront a test. Students often get this experience not only formative assessment but also the final assessment. It happens on students not only they who have the low brightness but also they who have the high motivation and brightness so they feel difficult to learn^[19].

There are many definitions of anxiety. Anxiety can be called as feeling toward what is not clear yet such as nervous, worries, and frightened^[29]. Anxiety also can be called as a condition that is not happy which occurred by individual and influences toward their physics^[30]. Besides, anxiety is defined as a psychological situation such as pressure, frightened, confusion, and menace from environment^[31]. Generally, the definition of anxiety is a situation which is not good that influences toward physics and psychology occurred by individual.

There are two categories of anxiety. Anxiety can become a positive thing and a negative thing. When anxiety has proper intensity, it will give a positive value because it is reputed as motivation. However, when anxiety is more than normal intensity, it will give a negative value because it will disturb students' physics and psychology. The forms of anxiety happened to students toward achievement of study result such as (1) decrease concept mastery, (2) nervous while answering questions, (3) worries, (4) be afraid or unconfidence-self to answer test^[19]. Anxiety overcomes several ways such as (1) doing well prepare like mastering concept for test, (2) doing practices, (3) doing Try out.

Practices test showed that the improvement of students' final performance result is with mean twelve percent^[20]. Online practice test gives many useful for students which students can answer questions inside and out of classroom so students can answer in other places without the interruption such as the interruption in classroom^[20]. Therefore, the practice in and out of class is needed. Test in classroom conducted by papers or online and test out of classroom conducted by online.

4. Technology Literacy

Technology has many definitions. Technology can be defined as an area that needed the development in order to accelerate adult literacy as early as 1999 but it keeps going^[21]. Technology is often defined as something useful for problem solving^[22]. The development of technology is so rapid on the twenty-first century.

The increasing of construct referred as skill that needs on 21st century is technology literacy^[23]. Technology literacy is interesting because so much working world using computer and network. Technology is not described only about a skill to use computer and other technology to improve learning, productivity and performance (U.S. Department of Education 1996).

The basic of the conceptual supported idea that improves technology literacy related to the advantages in other environment contents is based on two antipodes theories, (1) the improvement of technology literacy influences the improvement of confidence and motivates academic ability (confidence theory), (2) The improvement of technology literacy presents the improvement of ability to use technology tools as mediators of knowledge^[24].

One of the technology applications in education is like the

learning platform. The improvement of the online learning platform changes a way which students take the instructional information literacy part ^[25]. Besides, it can give new experience for students especially the experience on some of assessment.

5. Schoology

There are many Learning Management System (LMS) which has some of facilities to collaborate between teacher and students. One of them is schoology. Schoology is a learning management system which is gaining popularity for blended or online learning ^[9]. It is web K-12 learning enviromental which gives oppotunities for students, teachers and parents to access some of class material and information by internet. It is free. Schoology can connect between teacher and teacher, teacher and students, students and students, even among students to collaborate in online learning. In addition, schoology gives offer like collaboration tools and learning which is to learning for every student (Farmington Schoology, 2014). Schoology is the latest-year few tools Web 2.0 which is used in teaching writing ^[18].

5.1 Contents of Schoology

There are many facilities and interests on schoology such as online assessment and students' attendance. Schoology has other facilities such as assigment, disscussion, materials share and announcement. Students will get automatic feedback after submit answers especially multiple choices and matching. Students get feedback not only in test but also in discussion. The feedback is like score in test and is like respon from teacher or students in discussion.

5.2 How to register for Schoology

Schoology account consists of account as a teacher, as students and as parent. You can register to visit www.schoology.com. When doing this, you can choose one as a teacher or students or parent. Click Sign up to create new account and after having an account, you can login. After that, you complete your database account. Students will join in course. Each teacher has special code so students invite the code. In addition, students make a group in other tools.

6. Assessment through Schoology

Assessment on Schoology can be conducted as both formative assessment and summative assessment. Formative assessment on K-12 is given in learning process. This assessment can be used to improve students' learning through teachers' teaching materials and practices ^[26].

Suggestions for the online classes include upgrading the Blackboard site, more time for homework and projects, detailed assignments and more communication from the instructor ^[27]. Therefore, the implementation of online class was needed.

7. Physics on Assessment through Schoology

Physics is one of course which learned by students in Senior High School. Besides, Physics examines on national test in Indonesia. Physics has different characteristics than other courses. It consist of number, pictures, symbol, formula etc. They help to explain about concepts.

Assessment on physics area has several forms. One of them is cognitive assessment. In this assessment, the student is doing the test such as essay or multiple choice. The questions consist of text, formula and pictures. Texts describe the problem and supported by formula and pictures. Besides, the teacher can be attachment to share other information in other source such YouTube, website etc. It means that physics needs a facility like charateristics of physics.

8. Reducing Learners' Anxiety in Online Testing Through Schoology

In Indonesia, computer-based test has been implement. This test is assessment before graduate from both junior and senior high school. In Indonesia, the test called UNBK. The implementation s in capital city of province and school which are ready to test. Before the real test, students simulate for some of tests. It is like Try out (TO). Tes supported by Technology information can improve technology information knowledge nd technology literacy. In this test, students will find psychology problem like anxiety ^[13]. To familiar about this test, students must obtain this test in class and the teacher implements it in learning process. However, a few teacher don't have abilities to design an assessment in website. The teacher can use the facilities of schoology. Schoology is easy to be used and implemented for online learning menegement and sosial network platform which improve learning through communication and the better collaboration with high performance.

Online assessment can be conducted in the classroom or outside. Teacher makes questions like what they need. Test for in the classroom, test is conducted to know students' cognitive abilities like formative assessment, a part of material that is usual. Students is doing the test by themselves. Outside of classroom, the test is conducted as homework. Both of the test have different time duration to be done (e.g 90 minutes for test in classroom and 60 to 120 minutes for outside). The questions are provided randomly in order to prevent discussion among students. The questions for every student is different so one particular and others student is doing different question in same time. The setting of time influences on the rapid of finishing the test so if the time is over, the answers will be automatically submitted.

New technology assessment can improve teachers' ability to motivate more time-on-task in read and write ^[28]. Through implemented new technology assessment, students will care with technology. It called technology literacy. The anxiety as positive value can give positif effect for students, however the anxiety as negative value can give negative effect. The negative anxiety can be solved by practices. The way is implement technology in learning especially on online tes because the case disscuss about the students' anxiety towards online test. It can use schoology and it conduct as formative assessment.

9. Disscussion and Conclusion

In Indonesia, most of the test in capital city of province both Junior and Senior High School have used computer-based test. As new phenomenon, students need prior introduction. It is used to solve several problem about students' psychology. Students have positive ada negative anxiety. To overcome the

negative anxiety, students must do practices like answering a test. There are many course in the National Exam Computer-Based.

One of the that is examined in The National Exam Computer-Based is physics. Physics has different character with other subjects. In the test, physics questions consist of text, equation, and pictures. It can implement in online test. Online test need platform which is appropriate with physics. One of them is schoology.

Schoology has facilities such as text, equation and pictures. Additionally, Schoology has facilities for many kinds of test such multiple choice, essay and matching. Online test can improve students' technology literacy. This concepts can be implemented to know the impact of the treatment and know the students' perception about schoology.

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11. References

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