The urgency of using online-based learning media to enhance students’ self-directed learning and result study on accounting chapter of economics subjects

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Abstract. In the 2013 curriculum structure, accounting material in economic subjects for the social sciences programs at the Senior High School level given when students are already in class XII. Those phenomena often become an obstacle for both students and teachers, because the material discussed is quite a lot while the adequate time of face-to-face learning in class is minimal. These limitations cause students to be less optimal in achieving their result study because students are still dependent on the learning process is given by the teacher in class. This article aims to explain the importance of using online-based learning media to enhance students’ self-directed learning and improve their result study on accounting chapter of economics subjects. The method of this article uses a literature review study and the discussion based on the variety of related studies to the use of online-based learning media in the form of e-learning on students’ self-directed learning and students’ result study. The use of e-learning can encourage students to learn independently to overcome the limited face-to-face time on accounting material. Self-directed learning helps students to understand accounting material quickly so that it will have an impact on increasing their result study. It concluded that the use of online-based learning media could improve students' self-directed learning and result study on accounting chapter of economics subjects.

1. Introduction
Learning activities are a series of activities carried out by learners starting from the introduction of the subject to be studied, determining the objectives of learning activities to be achieved, analyzing learning material, and conducting evaluation activities to determine the achievements and success of the learning process. Generally, most of the design of learning activities are determined by the teacher as an educator in the school environment. A teacher is required to set learning objectives, prepare teaching materials, and make assessment instruments that are appropriate to the teaching field. Thus, a teacher has a great responsibility for all matters relating to the success or failure of learning activities.

Over time, the learning process undergoes various types of renewal. One important update is the application of new learning curriculum units. According to [1] curriculum substance is a plan of learning activities for students at school. The curriculum also can be interpreted as a set of goals to be achieved. In the curriculum there are formulations of learning objectives, teaching materials, learning activity schedules, as well as an explanation of the learning evaluation activities themselves.

In Indonesia, the 2013 curriculum is a new curriculum that is applied at the level of education starting from elementary school to senior high school. According to [2] the 2013 curriculum is a curriculum designed to develop a balance between spiritual and social attitudes. One of the attitudes to be developed is an independent attitude in the learning process. The development of an independent attitude towards students is very important to do. This can be seen as a response to the times that are starting to prioritize something digital. In the digital age, everyone is required to always adjust to various situations and conditions. Therefore, each person must be willing to try to learn to know and understand each new things independently.

Development of an attitude of learning independence to students can be done by increasing student activity in each learning process. Students who have the independence of learning will actively care about everything related to their learning activities. Someone who has high learning independence is
able to manage their own learning activities starting from the preparation stage, implementing learning activities, and carrying out evaluation activities.

Practically, the implementation of the 2013 curriculum in schools, especially at the senior secondary level, cannot be fully implemented properly. There are several obstacles that arise, especially the obstacles caused by changes in the composition of the material in several subjects, one of them is economics. One significant change is accounting material which was previously given in the XI IPS class even semester and the odd semester XII IPS class, now fully given in the odd semester XII IPS class and even semester. This change raises new obstacles in the implementation of economic learning, especially for class XII social sciences program.

In the 2013 curriculum, social sciences students at class XII in the odd semester more material about the accounting for service enterprise, while the material about the trading company accounting recording cycle was studied in the even semester. Discussion of trading company accounting material can be done better. This is because the effective time of face-to-face learning in class XII in the even semester depends on limitations. Often effective learning time is disrupted by the activities of class XII students in preparation for national exams as well as activities for enrolling in institutions or tertiary service programs. This condition needs special attention from social studies subjects in class XI social science. Accounting material is material that requires more analysis of activities. Students must update practical questions to solve transaction problems in each cycle and solve problems correctly. Therefore, the teacher needs to determine the right learning strategy to overcome the problem of effective learning time limitations in class XII IPS.

The use of online-based media, which one is e-learning can be used as an effective solution to deal with problems in economic learning in class XII. E-learning offers convenience and open access for its users. Through e-learning media, teachers can provide additional material or provide additional exercise to their students. The teacher can also determine the time limit when the material must be finished and when the practice questions must be done. Thus, learning targets can be achieved on time.

The implementation of e-learning media in economic learning will encourage students to be more active in participating in learning activities. The e-learning media will direct students to be more concerned with their own learning responsibilities. Students can learn material about accounting without having to wait for a direct meeting with the teacher. This kind of thing can actually be done without the help of e-learning media, but the use of e-learning allows students to carry out learning activities wherever and whenever as long as these students have internet access. The use of e-learning can also bring students closer to accounting learning material. The majority of students in each school have a smartphone device, this device is a tool to access learning material wherever and whenever they want. Thus, the application of e-learning media can encourage increased student learning independence in the economics learning chapter of accounting and ultimately increase learning outcomes obtained by the students themselves.

Accounting Learning

The process of recording, grouping and processing data related to finance is called accounting. In accounting it requires patience and, most importantly, continuous training so that it can solve problems according to the latest context. In line with the statement Noe in Herbert Chiheve [7] argues that Accounting is used in business today as a basic tool for procuring, integrating and disseminating information. Learning accounting in school, most students feel afraid of these lessons. Powers (1996) innsinuation that accounting operations and practices have continued and continues to suffer from the pervasive subjectivity of its calculative nature in most institutions of learning. The solution to this problem in school accounting is yet to be found. In accounting learning, Parnham further asserts that a “key aim for those who provide learning must be to make it easier for people to learn”, an argument for self-directed learning. Looking at the problems above, teacher-centered methods, such as the lecture method, are not effective for the purpose of promoting critical thinking or teaching professional values or other desirable learning outcomes.

Self-Directed Learning

Self-directed learners are engaged emotionally in the learning process, maintain high levels of self-generated motivation to pursue their self-determined goals and objectives, and are able to monitor and adjust their own learning. Independent learners possess high levels of determination, perseverance, and self-motivation Cross in Edwards [8]. In practicing students’ independence in learning, students need to be treated in stages so that students will be comfortable with learning and will be able to
motivate themselves in their learning process. Learning independence means the initiative of students to learn on their own outside the class hours provided by the school, this does not rule out the possibility of collaboration with other students. 

Result Study

Result Study are a highlight of the learning process. Learning outcomes are abilities possessed by students after receiving their learning experience Sudjana [3]. Assessment of the learning process needs to be supplemented with student learning outcomes, so it can be seen that the learning process is according to plan or not. The success of the education and teaching process in schools, which reflects how far the effectiveness of a learning activity in changing the behavior of students towards educational goals that are expected to be known by the assessment of Result Study.

2. Methods

The method of this article uses a literature review study and the discussion based on the variety of related studies to the use of online-based learning media in the form of e-learning on students' self-directed learning and students' result study. The writing of this article aims to explain the importance of using online-based learning media to enhance students' self-directed learning and improve their result study on accounting chapter of economics subjects.

3. Results and Discussion

3.1 Determination of E-Learning Utilization Model for Accounting Learning

Learning using e-learning media is done by integrating learning tools on the internet network. In order to be used optimally, e-learning media applications require a learning management system (LMS) that regulates the implementation of learning assisted by e-learning media. According to [3] there are three ways or models of e-learning utilization as learning media, namely:

1. Web-enhanced courses, this model places e-learning media as a support for improving the quality of learning in traditional classrooms (face-to-face classroom). E-learning media do not replace face-to-face activities carried out in class. The function of the internet is as a means of providing teaching materials and other supporting materials; provide enrichment; and communication between students and teachers, fellow students, group members, or facilities for students to access other learning resources. Learning activities using this media are designed to bridge the gap that occurs during face-to-face class.

2. Web-centric course, this model combines distance learning and face-to-face (blended learning). Some of the material is delivered via the internet, and partly through face to face. Online learning replaces some meetings in traditional classrooms. Face-to-face meetings are usually held at the beginning and end of the semester. Its functions are complementary. In this model the teacher can give instructions to students to learn the material via the web.

3. Web-course, in this model the use of the internet for educational purposes in which students and teachers are completely separate and there is almost no need for face-to-face learning (distance learning). All teaching materials, discussions, consultations, assignments, test exercises, and other learning activities are fully delivered via the internet. In other words, this model uses a remote system.

From the three models above, the web-enhanced course model is more suitable to be applied to overcome the problem of face-to-face economic learning time in class XII IPS. The application of this model in the use of e-learning media enables the teacher to retain the authority to manage the class and determine the learning objectives that must be achieved by the students.

3.2 Application of E-Learning Media to optimize Students Self-Directed Learning

The results of research conducted by Fatkul Arifin and Tatang Herman show that e-learning learning can encourage students to learn independently and increase the efficiency of learning time. Students can directly open the material through e-learning web pages when students need remedial or enrichment. Through the application of e-learning media in learning activities, students no longer depend on the time the teacher has [4]. This is also supported by the results of research conducted by Vina Serevina on 31 students in the Physics Education study program at the State University of Jakarta.
that there is an increase in student learning independence in the Mechanics course using e-learning media [5].

3.3 Effect of Students’ Self-Directed Learning on Students Result Study

In general, the independence of student learning can be demonstrated through the activeness of students in using various learning resources available to achieve the stated learning goals. Learning independence encourages students not to always depend on the material given by the teacher. Thus, students can more quickly understand learning material in this case accounting material. The faster students understand accounting material, the faster learning objectives are achieved.

The results of research conducted by Titin et al show that there is a significant positive influence of learning independence on learning outcomes in mathematics. The contribution of learning independence to learning outcomes is 16%. In addition, each increase in one unit of learning independence will increase learning outcomes by 1.452 units significantly. The same result was also shown by Samin, students who had a higher level of independence had a positive effect on mathematics learning outcomes. This is because students who have an attitude of learning independence have the maturity of the initiative to learn [6].

4. Conclusions

The results of the literature review show that the use of online-based media can help overcome the problem of limited face-to-face learning time in class XII on the economics subjects of the accounting chapter. Online-based media can function as a means to increase students’ understanding of accounting material while at the same time it can be used as an evaluation tool for students to determine the level of their understanding of accounting material. Ease of access and increasing internet users among students become one of the considerations regarding the importance of applying online-based media to the economic subjects of the accounting chapter. The use of online-based media is expected to improve students’ independent learning and improve their learning outcomes.

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References

[1] Ahid, Nur 2006 Konsep dan Teori Kurikulum dalam Dunia Pendidikan ISLAMICA 1 1 12-29.
[2] Aulia, N L, Susilo, S, and Subaidi, B Upaya peningkatan kemandirian belajar siswa dengan model problembased learning berbantuan media Edmodo Jurnal Inovasi Pendidikan IPA 5 1 69-78.
[3] Tiara 2006 Pengembangan Media E-Learning Model Web-Enhanced Course Berbasis Moodle untuk Meningkatkan Kemandirian dan Hasil Belajar Ekonomi Peserta Didik SMA Negeri di Jember Tesis FKIP Universitas Sebelas Maret.
[4] Arifin, F and Herman, T 2018 Pengaruh Pembelajaran Model Web Centric Course Terhadap Pemahaman Konsep Dan Kemandirian Belajar Matematika Siswa Jurnal Pendidikan Matematika 12 2 1-12.
[5] Serevina, Vina 2018 Improving Students’ Self-directed Learning Outcomes on Mechanics Subject by Using E-Learning Journal of e-Learning and Higher Education.
[6] Samin 2019 Hasil Belajar Matematika melalui Kooperatif Learning dan Kemandirian Belajar Faktor Jurnal Ilmiah Kependidikan 6 2 159-170.
[7] Chieve, Herbert 2013 Self-Directed Learning in Accounting Education in Polytechnics in Zimbabwe International Journal of Innovative Research & Development 2 9 275-277.
[8] Edwards, Nathaniel 2015 An Analysis of the Characteristics of Self-Directed Learners and Strategies to Enhance Self-Directed Learning in Education Systems: Transcending Boundaries The Asian Conference on Education 2015 Official Conference Proceedings.
[9] Jaleel, S and O.M, Anuroofa 2017 A Study on the Relationship between Self Directed Learning and Achievement in Information Technology of Students at Secondary Level Universal Journal of Educational Research 5 10 1849-1852.
[10] Kiboss, J K and Tanui, E K 2013 Effects of E-Learning Program in Accounting on Students’ Achievement and Motivation to Learn Double Entry Bookkeeping Journal of Education and Practice 4 9 50-57.

[11] M, Ramen, Moazzam, and B, Jugurnath 2016 Accounting teaching techniques with the advent of technology: Empirical evidence from Mauritius Proceedings of the Fifth Asia-Pacific Conference on Global Business, Economics, Finance and Social Sciences (AP16Mauritius Conference).

[12] Sabry M. Abd-El-Fattah 2010 Garrison’s Model of Self-Directed Learning: Preliminary Validation and Relationship to Academic Achievement The Spanish Journal of Psychology 2010, Vol. 13 No. 2, 586-596

[13] Septiana, Yolandaru 2015 The Use of Blended Learning to Improve Students’ Self Directed Learning in Accounting Class at Smk N 7 Yogyakarta Academic Year Of 2014/2015 Yogyakarta State University.

[14] Song, Liyan and Hill, R. Janette 2007 A Conceptual Model for Understanding Self-Directed Learning in Online Environments Journal of Interactive Online Learning 6 1 27-42.

[15] Wardoyo, Cipto 2016 Developing Learning Media Based on E-Learning on Accounting Subject for Senior High School Students Dinamika Pendidikan 11 2 84-93.

[16] Nofvia De Vega dan Arifin 2016 Penerapan Self Directed E-Learning Pada Keterampilan Menyimak Jurnal Masyarakat Telematika dan Informasi Volume: 7 No. 2 (Juli - Desember 2016) Hal.: 107-118

[17] Zaudah Cyly Arrum Dalu and Mojibur Rohman 2019 Pengembangan E-Learning Sebagai Media Pembelajaran Simulasi dan Komunikasi Digital bagi Siswa SMK Volume 04, Nomor 01, Edisi Maret 2019, 25-33