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ACADEMIC
RESEARCH**

PART A

**APPLIED
AND NATURAL
SCIENCES**



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EXPECTATIONS OF VOCATIONAL SCHOOL STUDENTS IN MAKASSAR TOWARD WEB-BASED LEARNING FOR COMPUTER APPLICATIONS SUBJECTS

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ABSTRACT

One application of a self-learning process is Web-Based Education (WBE). There is a variety of advantages WBE application, when compared to conventional learning. In WBE application, the readiness of students to use computers and applications needs extraordinary attention. WBE presents simulations that can help in understanding the phenomenon being studied. Through WBE, students can learn and recognize computer utilization in learning. The students believe that teachers have been providing time, responding to what they do, and providing enough material for them. Most students assume that the references provided are sufficient. They assume that learning resources provided are insufficient. Most students find it helpful, with chat and forum facilities in interacting with their friends. Majority of students agreed that teachers give assignments independently through the WEB. They assume that learning of KKPI through WEB is very attractive.

Key words: Web-Based Learning, Computer Application, Student expectation

1. INTRODUCTION

The vocational school aims at producing skilled workers, which is expected to be ready to use as stated in one of the goals of education for vocational school. Vocational education as part of secondary school and national education systems have some purposes [1]. The first is preparing learners to continue to pursue higher education or expanding primary education. The second is enhancing the ability of the learner as a member of the public in conducting reciprocal relationship among the social environments, culture and environment. The third is enhancing the ability of learners to develop themselves in line with the advancement of science, technology and the arts. The fourth is preparing learners to enter the work Field and to develop a professional attitude.

Regarding the above statement, there are some problems in the vocational school [2]. The problems are low teacher quality, inadequate facilities, and unsteady cooperation with industry, ineffective learning, and poor performance management. Therefore, the attempts and efforts in order to improve the quality of education need to be performed so that, in principle, they would produce quality human resources. The demanding qualified human resources became a necessity in global world order. With qualified human resources, the nation can counteract the invasion of a foreign power and be able to compete in the free market. In today's era of globalization, every personal excellence in their nations determines superiority of a nation. The advantage has to go through a formal education in schools.

Learning outcomes is a real quality standard of education. The problems encountered in implementing the education levels of primary and secondary school are low scores of the national examination, unreadiness of graduated entering the world of work. In addition, Knowledge owned by students graduated from elementary school who will continue their study to junior secondary school has not been adequate [3]. It is similar with the students graduated from junior secondary school who will continue to senior secondary school and students from senior secondary school who will continue their study to university.

Learning [3] applied by teachers in the field shows a tendency that the learning process takes place in the classical model. This model depends on the textbook method of teaching that more focus the process of memorizing than understanding concepts. Thus, students' intellectual skills are underdeveloped.

Computer Skills and Information Management (*Keterampilan Komputer dan Pengelolaan Informasi/ KKPI*) is one of the adaptive subjects given to all areas of expertise in Vocational High School (Curriculum of Vocational

School: 2004) [4]. This course is to prepare students to be able to anticipate the rapid development of information technology and global life. Human resources that can adapt to such conditions result from a quality education system. The quality of learning affects the quality of education.

There were a statement based on the interviews conducted by researchers with some teachers who follow the profession of Teacher Education in the Faculty of engineering, the State University of Makassar. The teachers come from different areas, including some teachers in vocational high school, Makassar. They stated that the subjects of computer applications tend to use printed materials as a media, namely published books using conventional methods. It means that the teaching and learning activities only focused on one side, namely the teacher.

One of the application processes of independent study is Web-Based Education (WBE). The web-based learning [3] [5] [6] is famous as Web-Based Training (WBT) or Web-Based Education (WBE). This learning can be defined as the application of web technology in the world of learning to the process of education. In simple terms, it can be revealed that all learning by utilizing Internet technology and during the learning, process is felt to occur by following the activities that can be referred to as a web-based learning. WBE has the speed to access the information. In addition, place and time of accessing information is unlimited. Learning activities can be easily conducted by learners anytime and anywhere that felt secure by the learners. The limited space, distance and time is no longer a complicated problem to solve.

The integration of information technology into education is in the form of Web-Based Education (WBE). There are various benefits of WBE applications in addition to several weaknesses when compared to conventional learning [7]. There are several important notes in the application of the WBE. First, the readiness of students to use a computer and the application needs to get attention. Second the students obtain benefits in applying WBE. The web-based learning that presents the simulation can aid students in understanding the phenomena that are studied. Third, through the application of WBE, students can learn the computer and get to know its utilization in learning. Based on the above description, then through this research, expectations of students in the vocational school, especially in Makassar on the WEB-based learning model for the subjects of computer applications have been found.

2. METHODS

The method used in this research is descriptive. The purpose of this descriptive study is to create a description, picture or painting in a systematic, factual and accurate information on the facts, properties and relationships between phenomena are investigated in this case regarding the use of web-based learning for computer application subjects were 31 students Vocational High School. Data were obtained through questionnaires, documentary studies, and literature.

3. RESULTS

Students who become the subject in the preliminary research were 31 students. They have a relatively homogeneous academic ability to know how the student's expectations of web-based learning subjects in computer applications. Based on a questionnaire given to students, the answers obtained are in the table 1, as follows:

Table 1. Needs analysis in the study of computer application in vocational high school

1	Do teachers provide time specifically to discuss the learning competency?	27	87.10%
2	Is the time provided by the teacher sufficient to consult?	25	80.65%
3	Does the teacher always give feedback after each task independently?	25	80.65%
4	Does the teacher always give feedback for each finished working on an assignment?	22	70.97%
5	Does the teacher give materials in the form of modules, power point, or papers that can be downloaded and studied alone?	17	54.84%
6	Does the teacher provide the materials packed interestingly?	28	90.32%
7	Are references provided sufficient?	10	32.26%
8	Are the resources provided sufficient?	15	48.39%
9	Are references provided up to date?	16	51.61%
10	for each learning material, are you interact with your friends?	27	87.10%
11	Do you often experience difficulty to discuss with your friends?	8	25.81%
12	do facility of chat and forums to help you interact with your friends?	25	80.65%

From the table above, it shows that most of the students who answer "Yes" for item 1. There are 25 students (80.56%) who answer "Yes" for the question of item 2 and 3. There are 22 students (70.97%) who

answer "Yes" for the question of item 4. There are 17 students (54, 84%) who answer "Yes" for the question of item 5. There are 28 students (90,32%) who answer "Yes" for item 6. There are students 10 (32, 26%) who answer "Yes" for item 7. The data shows that the references provided in schools are still inadequate for learning activities. There are 15 students, (48, 39%) who answer "Yes" for the question of item 8. Their reason is that there are still many incomplete books on vocational subjects in the library. Next, there are 16 students (51, 61%) who answer "Yes" for the question of item 9. There are 25 students (80, 65%) for the question of item 12. From this data, it can be seen that students need the forum of communication in interacting with peers in learning.

Furthermore, for the question: "If WEB application learning computers available in the schools, do you agree if the teacher gives assignments independently through the WEB?". Almost all students (30 people or 96,77%) answer "Yes." It means that they agree Web learning computer applications available in schools. They also agree if the teacher gives assignments through the WEB. Whereas, there are 25 students (83, 87%) who answer "Yes" for the question: "are you willing to open WEB learning computer applications and independent tasks and problems through a network of the internet outside of school?"

Table 2. Expectations of students toward learning computer applications in vocational school

No	Statement	Number of Students	Percentage
1	"If WEB application learning computers is available in the schools, do you agree if the teacher gives assignments independently through the WEB?"	30	96,77%
2	Are you willing to open WEB learning computer applications and Independent tasks and problems through a network of the internet outside of school?	26	83,87%
3	Is learning computer application through WEB learning computer applications more attractive?	30	96,77%
4	Are independent tasks and problems can be resolved through the WEB learning computer applications?	27	87,10%
5	Are you going to take advantage of the WEB learning computer applications as a tool of communication?	25	80,65%

The table 2 shows that if teachers are applying learning WEB application, the students will be prepared to open computer applications learning WEB. They could also work on their independent assignments through the Internet outside school. Next, there are 30 students (96, 77%) who answer "Yes" for the question of item 3 in the table 2. It can be seen that learning will be more attractive for the students if a computer application is implemented through the WEB. There are 27 students (87, 10%) who answer "Yes" for the question of item 4 in the table 2. Based on the students' assessment, it can be seen that the learning WEB-based computer applications will be able to complete their independent assignment. Next, there are 25 students (80, 65%) who answer "Yes" for the question of item 5 in the table 2.

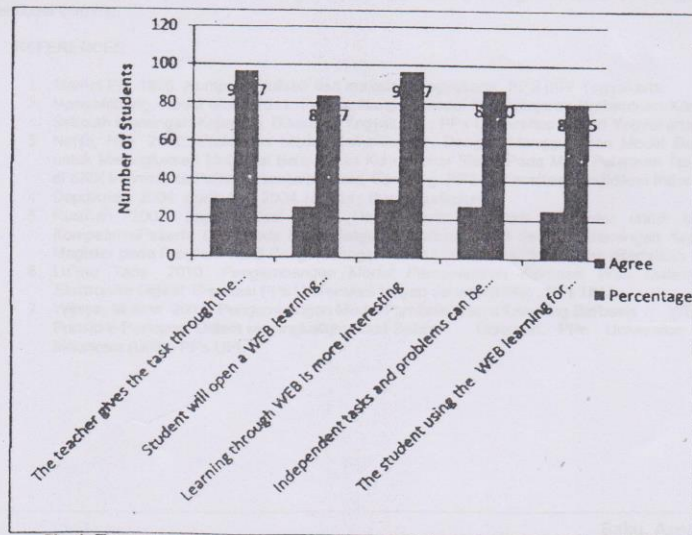


Fig. 1. The graph of the results regarding the Expectations of Students Learning Computer Applications in Vocational High School

From the answers given by the students, it can be noted that in general, the students feel that teachers have provided time, provided comments on what they are working on, given enough material for them. Most of the students felt that the references provided have not been sufficient. In addition, they consider that the learning resources provided are also not sufficient. Most of the students get many advantages by using chat and forum facilities in interacting with peers. In addition, the majority of students agree if the teacher gives assignments independently through WEB learning computer applications. Moreover, they feel that learning computer applications through the WEB is more attractive than conventional learning.

4. DISCUSSION

Web-based learning for the subjects of computer applications creates formal and informal learning solutions. One of the mistakes in thinking about web-based learning simply creates a system of formal learning, such as in the form of courses. However, the fact is currently 80% of learning about computer application learning material available informally. Most students in the learning process and dealing with a problem in their learning, they need a solution as soon as possible. In this case, e-learning must have many characteristics. The characteristics are in the following description:

- 1) Just in time means available to students when they need the Internet to accomplish their tasks and exercises.
- 2) On-demand means learning materials available at any time.
- 3) Bite-sized means available in small file sizes that can be used fast.
- 4) Web-Based learning provides access to a wide range of learning resources either human or content. Other errors in thinking about web-based learning is simply creating content only. However, in fact, the web-based learning is a social activity. The Web-Based learning provides a robust learning experience through an online community for users of e-learning. Humans are social creatures, so that there are many opportunities to communicate, collaborate, and share knowledge among users of e-learning.
- 5) Web-based learning supports people or groups to learn together. Web-based learning is not only the activity of the individual, but also the support of the people or groups to learn together, either for communicating, collaborating, sharing knowledge, and forming an online community which can be conducted directly (synchronous) or indirectly (asynchronous).
- 6) The web-based learning brings learning to the learner rather than to students learning.

5. CONCLUSION

In applying the WBE, students obtain many benefits. WBE offers simulations, which can help them in understanding the phenomena that are studied. In addition, through WBE, students can learn the computer and get to know its utility in learning. The students feel that teachers have provided time, provided comments on what they are working on, given enough material for them. Most of the students think that the references provided have not been sufficient, and they consider that the learning resources provided are also not sufficient. Most of the students get many benefits by using chat and forum facilities in social interaction with her peers. In addition, the majority of students agree if the teacher gives assignments independently through WEB learning computer applications. Moreover, they feel that learning computer applications through the WEB is more attractive than conventional learning.

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