Pre-Service Physical Teacher's Interest in Learning Nutrition Science Using E-learning

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ABSTRACT

This study aimed to determine the interest of 3rd semester students of Physical Education Study Program of Teacher Training and Education Faculty of Universitas Sriwijaya in Nutrition Science subject. This was a survey research which populations were 3rd semester students of Physical Education Study Program. The samples consisted of 44 persons. Data collection was using a student interest in learning questionnaire. Based on the result, it was obtained that the percentage of student interest in learning the subject with e-learning equals to 86.5. Therefore, the implication of this study is that e-learning-based learning process can increase student's interest and learning outcomes in Nutrition Science courses.

Keywords: Pre-service physical teacher, Interest in learning, Nutrition, E-learning.

1. INTRODUCTION

Technology has an important role in the learning process in the scope of education. Technology and learning media are adapted and specifically designed according to the characteristics of the students being taught so that they can contribute to create effective teaching. Beller, Technology is used in all areas of society. There are 2 trends in the world of education. First, the education system around the world uses digital Competence in curriculum and assessment [1]. According Darling-Hammond, L., Zielezinski, M. B., & Goldman, S, the learning contexts and technology have to match the characteristics of the learner. Together, these will give a rise in the learner's experiences and outcomes by using digital resources [2]. Muhajir, learning media is currently used as a learning aid between teachers and students. It aims as a system for sending information and the recipient of the information must be communicative, especially for objects visually [3]. Fraillon, the aim of education is to help students become digital-literate citizens so that the complexities and dynamics in today's society can be overcome [4]. The use of information technology provides convenience in the field of education. When delivering the material taught to students so that learning can be increased to be more effective and efficient.

Part of technology is e-learning, the application provides a knowledge transformation process that is utilized by web technology. This is a means used by students for the teaching and learning process both in terms of content and systems. Utilization of e-learning in education is needed to help the learning process. According Goyal, E-learning provides benefits ease of accessing material. Compared to Instructor-Led Training which requires scheduling time in one class, E-learning in its implications is easy to use and modify for teaching and training [8]. According to Sisco, strategies in the use of e-learning include content, technology, and services. Content includes learning materials, curriculum, and modules aiming to develop knowledge and skills. Technology is a method used to transmit content, including the internet and teleconferencing. Understanding the components of e-learning is the first and important step to understand e-learning itself and how to deliver the material [5].

The use of e-learning for the learning process can produce positive impact. In using e-learning, lecturers can include learning material in the form of videos so that student understands more optimally. Learning process does not have to be face to face, but can be done online and the lecturer communicates to students online. Based on Alhawiti & Abdelhamid, Y, e-learning objects are grouped according to their suitability for various types of learning styles. Then, learning objects are offered to students according to personal preferences, skills and needs [6].

In this study, e-learning was used by lecturers and students of Physical Education Study Program on the courses of Nutrition Science Subject aiming to improve students' understand of the material. The courses with a total of 2 credit hours constituted a Group of Work Skills Courses in the Physical Education Study Program of Faculty of Teacher Training and Education Universitas Sriwijaya. E-learning contents were in form of semester learning plans, learning videos, online forums, online quizzes, online midterm exams and online discussions. The use of e-learning at Universitas Sriwijaya as a medium in online course was expected to create monotony in perception of knowledge and understanding in achieving learning competence. Therefore, the implementation of Nutrition Science courses in odd semester of 2017/2018 used e-learning based learning. Each student could open his/her own e-learning accounts to access the assignments given by the lecturer.

Hall &Albrecht, the research findings indicated that there was an interaction in the nutrition education experience. This teacher balances barriers with the value of nutritional education and motivation to help students make healthy choices [7]. According to Jethro, O. O., Grace, A. M., & Thomas, A. K., e-learning is called web-based learning, online learning, distributed learning, or internet-based learning. In its' development, two modes of e-learning are distance learning and computer-assisted instruction. Distance learning uses technology to deliver material to students through the site [8]. According Saribas states that reflection is needed when the learning process uses media aiming to see if the learning goals are achieved [10].

The competence of this course covered several aspects such as cognitive and psychomotor in Nutrition Science courses. Students were able to implement insights and concepts, and then calculate nutrition for them and athletes. The goals in the cognitive aspects were to understand the concepts and master the application of nutrition. Direct learning that was done regularly in the course was a presentation with the media of Power Points. However, with the lack of time and teaching aids, the monotony in perception of knowledge, understanding and competencies mastery was hard to achieve. This was also influenced by the depth of concept and knowledge among the students. Then, students' activeness was still lacking because the lecturers dominate the learning process, interactions was only occurred in form of question and answer sessions with a minimal frequency at each meeting. According to Klašnja-Milićević, A., Vesin, B., Ivanović, M., & Budimac, Z, the results of the study showed that there was compatibility in using e-learning aiming to suggest that online learning activities have to be based on students' learning styles, knowledge and preferences [11].

Nortvig, A. M., Petersen, A. K., & Balle, S. H., conclude that there is an interest in education to determine factors that influence student's learning outcomes and satisfaction in the use of e-learning [12]. Ali, M., Hossain, S. K., & Ahmed, T. conduced that e-learning could contribute in increasing students' interest, acquire and share in knowledge, supporting student's understanding to be quicker, increasing engagement time, supporting the independent work and adding value. Thus, e-learning was used with the purpose of increasing the activeness in learning and supporting the learning process outside the classroom [13]. Ngalim, interest in learning is attention, liking and taste someone's interest in learning. This is due to participation, students 'desire to learn well and students' attention in the subject matter actively and seriously [14].

Finally, based on the observation, it was expected that using e-learning media in the Nutrition Science course in Physical and Health Education Study Program has an impact in term of student's interest. The quality of the learning process is hoped to be increased so that students are motivated in learning and able to understand the material better.

2. METHOD

This study aimed to determine the interests of Physical and Health Education Study Program students in attending Nutrition Science course using e-learning. The samples in this study were Physical and Health Education Study Program students which consisted of 44 people who took the courses. Data collection was using a questionnaire of student's learning interest and the results appeared in percentage formula resulted from the data collection with the questionnaire. Students' interest examined then converted into quantitative resulted from each point appeared in likert scale.

3. RESULTS AND DISCUSSIONS

3.1. Results

Based on the data collection obtained from the questionnaire, the result is presented in Table 1.

Table 1. Results of student learning interest

No	Indicator	The amount of data	%	Category
1	Attraction	156	88,6	Very good
2	Attention	152	86,4	Very good
3	Passions	152	86,4	Very good
4	Involvement	149	84,6	Good
	Amount	609	346	
	Average	**152,25**	**86,5**	**Very Good**

Based on the results of a student learning interest questionnaire collected from 44 students, it was obtained that attraction indicator was 156 with the percentage of 88.6 which was in very good category. Indicator of attention was obtained with the score of 152 with the percentage of 86.4 which was in the excellent category. The passions indicator was 152 with a percentage of 86.4 and the involvement indicator is 149 with a percentage of 84.6 which was in the excellent category.

3.2. Discussion

Dhir at all, e-learning facilitates and supports through the application of technology. Nowadays elearning is used in all fields of education and is widely used [15]. Based on the results of a student learning interest questionnaire collected from 44 students, it was obtained that the interest indicator was 156 with a percentage of 88.6 which was in the excellent category. While the indicators of attention obtained with a score of 152 with a percentage of 86.4 which was in the excellent category. The passions indicator was 152 with a percentage of 86.4 and the involvement indicator was 149 with a percentage of 84.6 which was in the excellent category.

According to Smedley, the application of e-learning for the institutions as well as their students provides the flexibility of time and place of delivering and receiving the material [16]. Tarus, J. K., Gichoya, D., & Muumbo, A. states that the benefits and opportunities presented by e-learning break the challenges in learning process from hard to weak. This paper finally recommends some possible solutions that public universities could embrace towards successful implementation of e-learning [17].

Student interest in learning using e-learning is very good. Students understand nutrition science material with more attractive design materials so that learning objectives are achieved.

4. CONCLUSION

Based on the results of the data analysis of the research conducted, it was concluded that students' interest in studying Nutrition Science in Physical and Health Education Study Program of Universitas Sriwijaya was obtained 86.5 which is in the Very Good category. Therefore, the use of e-learning can be one of the strategies that can increase student's interest in learning.

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