Critical Aspects of Psychology in eLearning Implementation

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Abstract— **Education should not only be a transaction of knowledge between educators and students, but also has an objective to enhance students to become qualified human. In the psychology perspective, to realize it, the educational curriculum should consider every individual is unique in the intellectual, attitude, motivation, and feelings. eLearning is good system of education which gives freedom to the students to learn, based on their uniqueness. However, some critical aspects must be investigated to develop a successful eLearning by paying attention on the characteristics of each individual.**

There are five critical aspects of psychology which are needed to be taken for guarantee the implementation of successful eLearning. There are motivation, emotion, self-discipline, social skill, and stress. By involving those aspects, the eLearning will not only be one way of transferring knowledge from teachers to students. It will be more interactive, more interesting, and will help the eLearning participants to follow the learning process.

Keywords— **education, elearning, psychology, skill, social, unique**

I. INTRODUCTION

Education is growing fast in this decade. The community became aware of the importance of education. Awareness of this, the glances of the world makes a lot of education becomes a business. The parties who have do not have background in education also competing to establish a school. Compared to several years ago, the society nowadays starts to think the education is also a basic need. Many schools are popping up in several countries, including Indonesia, start from the lowest level (Toddlers) until the college level. Schools are now scattered, not only in big cities but also in the narrow streets near the settlement. Moreover, media education is also growing, from the use of conventional media to more modern media (home-schooling, eLearning).

The situation creates good news for the world of education. However, people have to realize that education is not just business, but there is the philosophy contained in education. It has become essential, the parties related with education has to pay attention. People, who focus on education, are psychologists, especially educational psychology. They have to view educational psychology associated with the phenomenon.

II. LITERATURE REVIEW

Education is the effort that has the objective to prepare the students through counseling, teaching, and/or practice for their future. It is not only transfer knowledge from educators to students, but also develops them to be qualified human beings. Qualified is defined as individual who has intellectual ability and balanced emotional quotient, able

to compete, professional, conscience, and have social soul (able to adapt).

Learning system is expected to improve the students in some aspects, which are not only intellectual aspect but also emotional aspect, social, and ethical. In order to succeed the education objective, the educator can not work alone. They need help from another party, which are psychology, to develop individuals whose balanced emotional quotient.

Almost in all aspect of education, psychology is involved by public in the selection of learning media, learning process, giving the insight of the importance of behavior in the context of teaching and learning. So the learning process will run without ignoring the aspects of behavior and personality of the subjects of learning.

Based on psychology perspective, the curriculum should consider each individual are unique in intellectual, attitude, motivation, and feelings [5]. The curriculum should provide opportunities to every individual to be able to develop themselves based on potential.

The habit of thinking and acting is consistently and continuously able to develop a person to become competent. In order to develop students' competency, education should involve the ability, experiential learning, and learning outcomes based on their uniqueness.

One of the learning system which gives freedom to the students to learn, based on their uniqueness, is the eLearning system. However, some critical aspects must be investigated to develop a successful eLearning by paying attention on the characteristics of each individual.

III. eLEARNING SYSTEM

From the history of education, there are some learning systems which used by the education institution. There S-learning (speech learning) system, P-learning (paper and pencil learning) system, and eLearning (electronic learning) [6]. S-Learning process capitalized with communication can be implemented for any age. Toddlers can be taught and trained to use these media. The learning is not only transferring the knowledge but also the relationship between teachers and students.

P-learning system is common way and already implemented in any level at formal education. Using this media, the students a re required to write and read the subject material. Library is used as a knowledge source, besides teachers and parents. No wonder if the children always carrying a large bag containing books at the school. Many stakeholders (parents and children observer) are less agreeing with this situation. This situation is not only burden child's mind, but also child's physical.

The updated system of P-learning is eLearning. This system began to be known around the 1990s. The capital of eLearning is not only books, but also the computer and internet connection. It has been predicted, soon, the students' bag is no longer contains books and stationery only, but also contains a laptop.

Communication process via computer is identical with communication in the P-Learning. However, the communication in computer does not have non-verbal symbol exchanges that strengthen meaning of message [1].

At first glance, eLearning is distance learning (distance learning) that takes advantage of computer technology, computer networks and/or the Internet. eLearning allows the learner to learn through computers in their respective places, without having to follow the lessons physically or meet lectures in class. This system is suitable if there are long distances between educators and learners.

eLearning is often understood as a form of web-based learning that can be accessed from the intranet on a local network or the Internet. In this case, eLearning is an additional learning system, besides teachers, parents, friends and books. This paper will focus on the eLearning as an educational system for study, learn, and interact with the lecturers via internet.

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IV. IMPLEMENTATION

The lecturers want or do not want eLearning, can not avoid this kind of learning. eLearning will be used anyway soon or later. However, for successful education using eLearning, lecturers have to form wisely. So, the students are not only being a subject of the technology usage. The following aspects are needed to be taken for ensuring the optimum implementation of eLearning.

A. Motivation

Motivation has influences for a person and drive he/she can success or not in doing something. Motivation also has a control to push the individuals for starting or continuing their efforts [5]. eLearning also requires the students to have a strong motivation if they want to succeed in the learning process. Strong self-motivation is needed for eLearning students [3].

In other words, the student has a weak motivation is less suitable to study via eLearning. Students with low motivation have to meet other students directly, so the sense of competitiveness increases.

B. Emotion

Emotions have an important role in the process of learning. Some psychological research has even proved that motivation together with the emotions will increase sharply and will eventually produce a good performance. For instance, when a child loves his teacher (there are emotions of love), then follow the lessons in motivation will increase. Instead of a student who has a negative emotions (shame, rejected and insecure), will reduce their motivation.

If the participants feels enjoy and helpful when they use eLearning, the positive emotions can arise. When the students succeed in eLearning, they will display high enthusiasm and pride. So, the learning system must able to create positive emotions.

eLearning should not be only conversion from face-to-face meeting to indirect meeting or from book to computer screen. The benefit of technology has to form to create the better learning. Animation, video, audio, and other multimedia must be used to illustrate any knowledge which can not be done easily in the conventional learning. Admiration of technology capability in eLearning can create positive emotions of participants to use eLearning.

C. Self-Discipline

eLearning system gives the freedom for students to study anytime and anywhere. So the participants free to choose the most suitable way of learning. Individuals are the main actors on their study. It needs self-discipline from the student to follow and manage their study. Otherwise, the participants can stop the learning and never come back to the process.

If someone succeeds with eLearning system, it can be assumed he/she has an internal discipline. It is one reason for some companies when selecting prospective employees. If the company knows a prospective employee succeeds in eLearning, he/she is predicted to have good discipline on study and also at work.

D. Social Skills

Implementation of eLearning has to pay attention on social sciences and behaviors (such as good habits, ethics, and psychology). The skills aspect of empathy, sympathy, and skill of listening skills can not learned from textbooks, but from the personal relationships between teachers and students. The students can not learn how to understand and practice these social skills if he/she does not have good relationships with teachers.

eLearning has to provide the collaboration system between participants and discussion between student and the teacher. The time and the place should not be barrier. Facility to collaborate the knowledge, like Wiki, is able to build the social skills between the students even though they can not meet in one place or one time [4]. Email and chat facility in the eLearning system will help the student to learn how to communicate and have good

relationship with the lecturer. Teachers are still needed to be mediators in eLearning.

D. Stress

A person will experience stress in the learning process, especially if they learn only in one way or individually. In a traditional learning system, there is the possibility for a teacher to interact with the students face-to-face to increase their motivation, become a place of counseling, and discuss their idea.

Physical touch-non sexual would enhance the love hormone (oxytocin) and reducing the causes of stress enzymes (alpha amylase). In addition, physical touch can also stimulate the release of hormones endomorfin, whose role to calm the mind [2].

Sometimes, the interaction between lecturer and students are needed in the eLearning system. The lecturer should give attention when there is no progress within certain time.

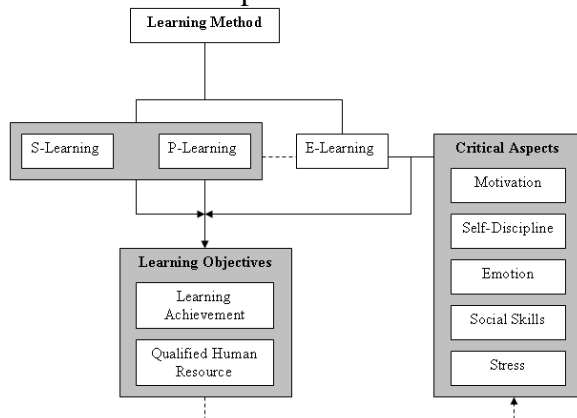The influence of the five critical aspects can be seen in the picture below.

Fig. 1 The influence of the five critical aspects on Learning

When students participate in eLearning with consideration to critical aspects of the fifth, students can achieve the learning objectives. With their success, the five critical aspects will be more positive. This condition will support students in achieving learning goals even higher.

V. CONCLUSIONS

The purpose of educational should not only get the degree and/or transferring knowledge from teachers to students, but also builds the students as a qualified human during the process of learning. However, each student has their own uniqueness. The education should pay attention on the uniqueness of students.

Even though all of subjects are possible to be implementing in the eLearning, not all of them are suitable to be teach without face-to-face meeting only. Most of exact sciences can be teach by using eLearning technology only. However, some of social fields have to be combined with the conventional meeting. The subjects related to social skills are better to be learnt if both of learning can be used together.

The students who have high motivation, discipline, emotional instability, and already have a good social life are suitable to use eLearning system. Individuals who do not have a mature personality and a good social life still have to be accompanied with the conventional learning system.

The five critical aspects of psychology play an important role in the success of students to participate in eLearning. When students succeed, the five critical aspects will further strengthen the success in eLearning and other kinds of learning.

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