

Combination of two Learning Approaches which are Self-Regulated Learning and Personalized Learning (SRPL)

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Abstract. Nowadays, learning trend by using internet is increasing especially in higher educational level. The old learning strategy which is practiced in traditional way like face-to-face learning in class should be change to ensure that it can be applied in learning based on internet technology. One of that learning approaches is self-regulated learning. Previously, self-regulated learning was adapted in learning without being supported by any other learning approaches. Lately, there is a learning approach known as Self-Regulated Personalized Learning (SRPL) in which, this learning approach is a combination of two learning approaches which are self-regulated learning and personalized learning. In general, this paper will be discussing about the combination of two learning approaches which are self-regulated learning and personalized learning.

Keywords: Personalized Learning, Self-Regulated Learning, Self-Regulated Personalized Learning.

1. Introduction

Learning today becomes a way of life for modern society. This is caused by the learning mode of experiencing a revolution based on the development of emerging Internet technologies [1]. Effects from the learning that grow in line with the development of internet technology, a variety of learning approaches via the Internet was introduced as gaming, simulation, adaptively, mobile learning, etc. But, we cannot doubt that learning approaches that have the most attention among researchers for learning today, that is the use of e-learning. So in this case, researchers and instructors need to consider various methods to ensure the use of e-learning can provide a meaningful impact to the students' learning. Various theories, approaches and learning strategies try to apply in the e-learning to ensure that e-learning used by students can affect meaningful learning and students receive an optimal learning [2]. Among the approaches and learning strategies that are applied in the e-learning are currently self-regulated learning, problem-based learning, collaborative, cooperative, and many more. As already mentioned, the aim of this paper is to discuss about the combination of two learning approaches which are self-regulated learning and personalized learning that are applied in e-learning nowadays.

2. Self-Regulated Learning

Actually, the approach of self-regulated learning was first introduced by applying the traditional learning method which is face-to-face learning in the classroom. However, recently, this learning approach which has been applied in learning involves the use of computers. This shows that, self-regulated learning approach is not only appropriate to be applied in traditional learning, but also can be applied in learning based on computer. In general, self-regulated learning is defined by [3] as:

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Self-regulated learning is an active constructive process whereby learners set goals for their learning and monitor, regulate, and control their cognition, motivation, and behaviour, guided and constrained by their goals and the contextual features of the environment. (p741)

Self-regulated learning involves learning process that occurs in an orderly manner and effective as it involves several phases that need to be experienced by students in a sequence (Refer Figure 1). This phase is known as cyclical model of self-regulated learning process introduced by [4]. In the first phase which is forethought, it involves an activities such as goal setting and strategic planning that occur before the learning process. In the second phase which is performance, it's refer to the actual learning process and involve strategies aimed at fostering the quality and quantity of learning performance through self-instruction, self control and self-observation. In the last phase which is self-reflection, it's involve procesess of self-evaluation, causal attribution and self-reaction.

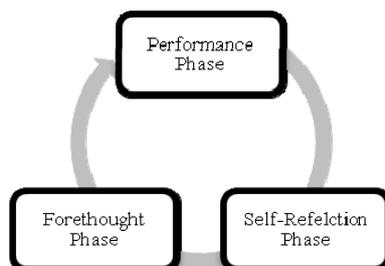


Figure 1: Cyclical model of self-regulated learning process [4]

3. Why Self-Regulated Learning is Important?

Self-regulated learning is important because according to [5], adult students especially students at the tertiary level should have the characteristics of self-regulated learner. In general, self-regulated learning is lifelong learning. Besides useful to the requirements of lifelong learning, self-regulated skills are also important because it will make the learning process occurs more regularly. In fact, students who have the characteristics of self-regulated learning are able to make choices and plan their own learning process as necessary [6]. The characteristics of self-regulated learning based on past research findings are as follows:

- Responsible for own learning [7]; [8]; [9]
- Have the ability to control the learning to achieve learning goals [7]; [10]
- Have skills in managing the learning [7]; [10]; [11]
- Smart in planning the strategies and opportunity of learning [7]; [8]; [10]; [11]; [12]
- Independent [7]; [13]; [14]; [15]

4. Personalized Learning

Personalized learning is defined as learning that allows each individual student to achieve a learning environment that is appropriate to their personal characteristics [16]. Personal characteristics that are often used to create personal learning environment in e-learning are learning styles, cognitive styles, screen interface design and learning object [17]. One of the best essential features of a personalized learning environment is that students have the opportunity to interact with learning objects that best fits with their needs [18]. This indicates that, the provision of learning materials or objects as diverse as each individual student should have a variety of differences between each other. These differences include physical, mental and emotional [16]; [19].

In fact, personalized learning can only be implemented by creating a personalized learning environment. Therefore, to create a personalized learning environment, developers must follow the guidelines have been prepared based on previous studies. Characteristics of the personalized learning environment has been outlined by [20] are as follows:

- Provides to each student, a space and self-control to develop and share ideas in their learning.
- To provide a more holistic learning environment.
- Allows students to organize and develop appropriate learning environment with their own learning styles.

- Each individual will strive to manage their own learning.
- Make students more responsible and independent towards their own learning.

5. The Combination Self-Regulated Learning and Personalized Learning

In general, self-regulated learning and personalized learning are two learning approaches that apply to the learning process with separately. However, since 2005, both of these learning approaches started to be combined in the study involving learning by using technology. The consolidations of these two learning approaches are intended to improve the quality of student learning and enhance their skills to learn better [6]. Figure 2 shows the studies that involving both learning approaches in their research.

The consolidation of these two approaches is done after it was analyzed. According to [21], both of these approaches complement each other with their strong and weak respectively. Meanwhile, according to [6], the two learning approaches are combined because they have a significant relationship between one another.

Table 1 below show the weaknesses and lack of self-regulated learning and personalized learning presented by [21]. Furthermore, the merger of this learning approach is known as self-regulated personalized learning (SRPL). In general, Figure 3 is the result of a combination of both learning approaches in the form of diagrams.

Many of the positive feedbacks are given after the merger of the two learning approaches. Personalized learning or adaptation technology is an approach that can be used to support self-regulated learning [21]. Meanwhile, according to [1]; [6] personalized learning can improve the levels of students' self-regulated learning.

Table 1: Advantages and disadvantages of personalised learning and self-regulated learning

Personalised Learning	Self-Regulated Learning
Automatic adaptation of learning process to learner characteristics	The learner has control over his/her learning
Advantages	
Tailored teaching/learning	Learning cycle of planning, learning and reflecting
Disadvantages	
Danger of having learning process controlled too much by the system	No guidance may cause difficulties for some weak learners

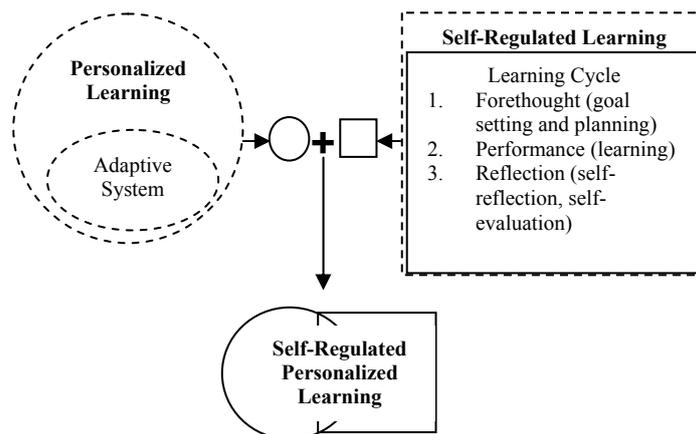


Figure 3: Combination of self-regulated learning and personalized learning become Self-Regulated Personalized Learning (SRPL)

6. Conclusion

In conclusion, the merger of these two learning approaches is one of the efforts and strategies to improve student learning process. Further research is needed aimed at how the learning approaches is appropriate since both of the learning approaches are complement and support each other.

However, to implement both learning approach will provide a challenge to the instructor. The system development process will become more complex and the effort to create a learning process that involves both of these approaches is not an easy task and very challenging because both of the learning approaches should be emphasized [22].

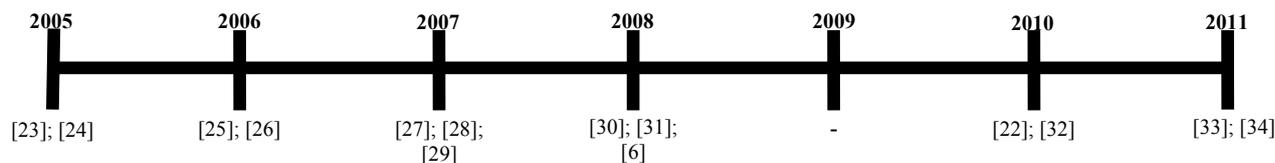


Figure 2: The evolution research in SRPL

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