WEB-BASED LEARNING AND SELF-REGULATION OF THE LEARNING

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ABSTRACT

The actual purpose of the university teaching is to prepare specialists who can study and work independently. The key component of training technologies for developing such skills are external regulation and self-regulation and effective educational environment. In this article we describe the SRL (self-regulation learning) and Web-based learning natures. This is the base to reveal the common influence of both phenomena on the learners and the quality of learning. SRL is desired and the ability for effective control of the own learning is very important and valuable as leading to success not only in the classroom but also out of it.

Keywords: self regulated learning /SRL/, web-based education.

INTRODUCTION

Science researches on the self-regulation and self-regulated learning (SRL) are well outlined within the thematic research trends in Pedagogic and Cognitive Psychology in the last 25 years. This fact is determined by many reasons most important of them are the new educational aims, training types, learners’ and trainers’ characteristics and others as well as the denial of the old accent on certain learning aspects especially the academic students’ learning which are deprived of sense and deprive of sense according to some researchers. These researchers share the common understanding that the past theories of learning have exhausted their popularity and usefulness and that the outlined trend towards strengthening the research interest on the SRL will continue. More suitable and useful conceptual researches are expected and the SRL might be the sun energy needed for reaching new territories. One of the thematic research fields connects the SRL and the Web-based learning.

First of all it is needed to describe the SRL and Web-based learning natures. This is the base to reveal the common influence of both phenomena on the learners and the quality of learning.

The present-day researches show that SRL is desired and that the ability for effective control of the own learning is very important and valuable as leading to success not only in the classroom but also out of it [5, 6].

SRL is more and more associated with reaching fundamental and certain educational goals. According to many scientists the SRL conception is in the focus of the educational and research theory today [1].

Along with these conclusions scientists consider that during the last three decades the framework for understanding the psychological base of learning is gradually shifting up from teacher-centered approach to student-oriented one. In accordance to this understanding they suggest more and more responsibility for learners regarding their own learning while the learn-
ing is described as a process for ideas elaboration by learners who construct their own conceptualizations and solutions of academic problems. Thus the trainees should not be dependent on their trainers in order to learn. Instead they should be independent life long learners. In that point of view the teachers concentrate their attention to the learners’ strategic efforts to control their achievements through specific beliefs and processes. Namely this self-regulating processes and beliefs are in the systematic researches focus [7].

The scientific literature shows different interpretations of the SRL construct. Their systematizing describes the SRL nature with the help of the following concepts:

- goal-setting;
- planning;
- metacognition;
- self observing;
- monitoring;
- self-awareness;
- self-assessment;
- self-efficacy;
- self-control etc.

The theoretical and empiric reviews as well as the pedagogical practice undoubtedly show the SRL actuality. The initial interest to SRL has its history and we may say it arises in the disputes between different ideas and understandings. Though in these wide thematic variety the researches on the relation SRL – Web-based learning is outlined as a differentiated theory.

The web-based learning is a kind of the electronic learning (EL - E-Learning, E-learning, e-Learning, e-Learning, ELearning, eLearning, eLearning, eLearning), EL is defined as a new paradigm in the educational technologies field and is associated with the learning activity which includes using of computers, networks and interactive study content. It is outlined that the computer is not always the central element of the activity but it, along with the computer network, play an important role in the process of providing the study content. EL creates possibilities for forcing the learning in the conditions of lower prices, increased access to learning and clear accountancy of all participants in the learning process (3). E-learning becomes more popular in the dynamic higher education environment. The bases of the e-learning are the so-called “Course Management Systems” known as “Virtual learning environment” or VLEs. These are systems for multinode electronic lectures performance.

Defining of the EL conception is accompanied with discussions but there are similarities in the definitions variety which are grounds for differentiation of two types definitions.

In wider aspect EL is defined as:

- Cognition helped and realized by the means of electronic media/means and electronic materials
- Education by the means of internet, network or computer [2]
- Electronic process of cognition which includes web-based training, computer based training, virtual classrooms and digital cooperation. The core part of e-learning goes through internet, intranet/ extranet, audio or video devices, satellite TV and CD-ROM.

In narrow aspect, which becomes more popular in the education and society, the electronic learning is understood as teaching knowledge and skills helped by or totally given by internet.

Additional clarifying on the EL nature and meaning and hence on the mutual influence between this media and SRL is made by revealing the forms of EL realizing. They are as follows: computer based (Computer-Based Training, Computer-Based Tutorials, Computer-Based Teaching) – training on computer without teacher’s participation; computer aided (Computer-Aided Instruction, Computer-Aided Learning, Computer-Based Learning, Computer-Based Teaching) – teaching technology used as addition to the traditional teaching methods; web-based or Internet-based teaching (Internet-Based Training-IBT, Online Training, Net-Based Training) / (web-based learning, web-based training) – it is provided through Internet or Intranet; Web Enhanced Courses – web-site for certain study subject which includes study program, user’s manual, additional means, online exercises, practical tests and so on – they are the widely used ones in the higher schools; Web Managed Courses – create opportunities for cooperative work for the course participants and for on-line testing; blended learning – transition from the auditory towards electronic learning face to face with the teacher and on-line teaching. The blended learning includes the best of both the traditional classroom (auditory) training and the on-line training.
Researches in the EL field take significant part in the practical and applied researches on SRL. From pedagogical and methodological point of view it is absolutely logical and explicable. This type training is specific and by the rule gives better possibilities for independent planning, self-control, self-analysis, self-assessment and so on by the students – these all are SRL attributes. Still it is needed to be admitted that the scientific literature acknowledges both EL advantages and disadvantages (Table 1).

Within the researches which bound SRL and the Web-based learning the one conducted in the Taiwan National University for Science and technologies is outlined with its specific precision, wide diagnostic varieties and the possibility for generalizing the defined conclusions. It was made in 2005 (2) and examines the impact of the self-regulated learning strategies on students beliefs for motivation in the Web-based learning environment. The author proceeds from the assumption that these strategies help the students’ self-analysis and self-assessment on one’s own efficacy and motivation for learning. The results show that motivation was positively affected by the Web-based courses with SRL strategies. Web-based learning encourages construction of knowledge for one self and skills for controlling one’s own learning. Students can search for models; pose own questions; construct their own models, conceptions and strategies for successful studying. For them the web-based learning is suitable environment in which they can have responsibility for their own studying as they can control their learning process. Students became more responsible for their own learning and more intrinsically orientated and disposed to the challenges. They tended to appreciate the study material value and became more confident in their beliefs and classroom performance.

The Web-based learning is a reply to the demands for information environment in which nowadays person should enrich one’s knowledge and skills in order to be competitive. This person needs information and knowledge in every time and at every place. They also need skills for independent managing within this new environment and all these are assured by the SRL construct. This construct is formed by optimization of the traditional classroom with electronic devices – this changes the way students and teachers reach and use the information.

Table 1. Comparison of advantages and disadvantages for students.

<table>
<thead>
<tr>
<th>Advantages for students</th>
<th>Disadvantages for students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning with one’s own temp</td>
<td>Necessity of connected to Internet computer</td>
</tr>
<tr>
<td>Possibility for choosing individual way through the material</td>
<td>Necessity of training for work with computer and Internet</td>
</tr>
<tr>
<td>No time and place limits</td>
<td>Dependence on the technical network features</td>
</tr>
<tr>
<td>Possibility for maintaining of a distant connection with the teacher and other students</td>
<td>Quality of the Internet information is not guaranteed</td>
</tr>
<tr>
<td>Possibility for interactive self-assessment of the knowledge and the practical skills</td>
<td>Necessity of strong motivation, strict self-control and self-discipline</td>
</tr>
<tr>
<td>Possibility for distant (global) approach to learning materials</td>
<td>The alive contact with the teacher is missing</td>
</tr>
<tr>
<td>Advantages for teachers</td>
<td>Disadvantages for teachers</td>
</tr>
<tr>
<td>Flexibility of teaching time and place</td>
<td>Necessity of training for work with computer and Internet</td>
</tr>
<tr>
<td>Possibility for easy actualization of the learning material</td>
<td>Dependence on the technical network features</td>
</tr>
<tr>
<td>Convenient communication with the students – individually and as a group</td>
<td>Unsettled problems with the electronic materials author rights</td>
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<td>Convenient collective courses development</td>
<td>Complexity in creating a web-based course</td>
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<td>Possibility for repeatedly use of learning materials</td>
<td>Much more time needed for creating a web-based course</td>
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<tr>
<td>Possibility for automated control of knowledge and the practical skills</td>
<td>Not all pedagogical approaches are suitable for internet media realization</td>
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REFERENCES