Chapter 101
Ideas on the Future of Intelligent Web-Based E-Learning

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ABSTRACT

With the outstanding improvements in technology, the number of e-learning applications has increased greatly. This increment is associated with awareness levels of educational institutions on the related improvements and the power of communication and computer technologies to ensure effective and efficient teaching and learning experiences for teachers and students. Consequently, there is a technological flow that changes the standards of e-learning processes and provides better ways to obtain desired educational objectives. When we consider today's widely used technological factors, Web-based e-learning approaches have a special role in directing the educational standards. Improvements among m-learning applications and the popularity of the Artificial Intelligence usage for educational works have given great momentum to this orientation. In this sense, this chapter provides some ideas on the future of intelligent Web-based e-learning applications by thinking on the current status of the literature. As it is known, current trends in developing Artificial Intelligence-supported e-learning tools continue to shape the future of e-learning. Therefore, it is an important approach to focus on the future. The author thinks that the chapter will be a brief but effective enough reference for similar works, which focus on the future of Artificial Intelligence-supported distance education and e-learning.

INTRODUCTION

Technological developments and improvements have a remarkable effect on almost all fields of the life. At this point, our daily activities are also affected rapidly, as a result of affects from the changes – improvements in the technology. One of the most important fields that are very sensitive to technological changes is education. In time, standards of the education field have changed again and again, especially because of some specific technologies like computer and communication. Today, individuals have chance

to experience educational processes via advanced, high technologies, which improve the ways of receiving information, transforming it into a owned knowledge, and also keeping a stable system including activities of receiving and sharing information, which points a typical concept of teaching and learning generally.

When we examine today's technological aspects to perform educational activities, we can see that especially E-learning has a great impact on the related processes. Additionally, improving popularity of mobile device usage also causes a continuing power on E-learning solutions. Certainly, revolutionary changes on the Web platform of the Internet technology have a remarkable role on all the changes in today's educational approaches, methods, and techniques.

With the outstanding improvements in the technology, number of E-learning applications is increased greatly. This increment is associated with awareness levels of educational institutions on the related improvements, and power of communication and computer technologies to ensure effective and efficient teaching and learning experiences teachers and students. Consequently, there is a technological flow that changes standards of E-learning processes and provide better ways to obtain desired educational objectives. When we consider today's widely used technological factors, especially Web-based E-learning approaches have a special role on directing the educational standards. Improvements among M-learning applications and the popularity of the Artificial Intelligence usage for educational works have given a great momentum to this orientation.

Considering the related explanations, objective of this chapter is to provide some ideas on the future of intelligent Web-based E-learning applications, by thinking on current status of the literature. As it is known, current trends on developing Artificial Intelligence supported E-learning tools continue to shape the future of E-learning. So, it is an important approach to focus on the future. The author thinks that the chapter will be a brief but effective enough reference for similar works, which focus on the future of Artificial Intelligence supported Distance Education and E-learning.

According to the subject of the chapter, remaining content is organized as follows: Next section is devoted to some brief explanations on Web-based learning, new – future generations of Web platform, and M-learning (Mobile learning). After this section, some brief ideas on the future of intelligent Web-based E-learning applications – solutions are explained under the third section and conclusions regarding to the subject are provided in the context of the last section.

FOUNDATIONS

Because the objective of the chapter is based on expressing ideas on the future of Web-based E-learning, some explanations regarding to this subject should be provided in order to enable readers to have idea about it. Additionally, changing functions and features of the Web platform also affects the applications over it; so, new – future generations of the Web should also be taken into consideration. Finally, because the future highly depends on using mobile devices, we should also focus on the learning aspect of mobile based activities by explaining M-learning.

Web-Based E-Learning

Today, there are many different types of E-learning activities, and these activities determine the general name of some certain E-learning related application ways. One of them is called as the "Web-based

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