EXPLORING THE TYPES OF E-LEARNING CONTENTS FOR THE SCIENTIFICALLY GIFTED

Abstract:
In 1998, Korean Ministry of Science and Technology selected the Institute for the Scientifically Gifted (ISG) through public contest. The selected ISG taught the scientifically gifted for 100 hours and around 30% of the class was taught online. When the ISG was first established, the curriculum and textbook were not fully developed and it was difficult to find teachers for the classes which made it impossible to teach class offline for 100 hours. As a result of the establishment of the ISG, cyber education for the scientifically gifted was able to start.

The ISG began by using the bulletin board system (BBS) for their cyber education for the scientifically gifted. For example, the teacher would upload information on offline classes and discussion subjects while the scientifically gifted would upload questions or tasks they had completed. However, the development of e-Learning contents for the scientifically gifted to self-direct their studies was insufficient. The usage of the BBS to share files and information has continued to this day, 2016.

20 years have passed, now in 2016, since cyber education for the scientifically gifted began. However, not much has changed, which shows that cyber education for the scientifically gifted is at its peak. Many reasons for the unchanging cyber education for the scientifically gifted can be found. First, the classes from the ISG does not count as regular class time. Second, the prejudice against cyber education that states that cyber education only assists offline education and that with only cyber education, high-quality education for the gifted cannot be taught. Third, one of the critical success factors of cyber education is the development of high-quality content services, but the development and usage of e-Learning contents suited for the scientifically gifted has been done lazily.

As a result of the reasons above, in this study we explore the types of e-Learning contents for the scientifically gifted. In order to achieve this study’s goal, we performed research following certain steps. First, we analyzed the characteristics of the scientifically gifted. Second, we defined the six types of e-Learning contents (i.e. tutorial-oriented, simulation-based, instructional material-oriented, task-oriented, discussion-oriented type) which were most fitting for the gifted. Third, we analyzed the best types of the e-Learning contents for the scientifically gifted by using the online survey system. For this study, the professional group participated in an online survey system in order to gather their opinions.

Keywords:
Cyber education, e-Learning, the scientifically gifted

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