A New E-Learning System Design Focusing on Emotional Aspect Using Biological Signals

[1]Saromporn Charoenpit, [2]Michiko Ohkura
[1]Graduate School of Engineering, Shibaura Institute of Technology
[2]College of Engineering, Shibaura Institute of Technology (Japan)
nb12103@shibaura-it.ac.jp, ohkura@sic.shibaura-it.ac.jp

Abstract

E-Learning is the computer and network-enabled transfer of skills and knowledge. It is commonly thought that new technologies can make a big difference in education. Many universities have been the adoption of learning management systems (LMS) to support the teaching and learning process. Most of the LMS application allows for student registration, the delivery and tracking of e-learning courses and content, and testing, and may also allow for the management of instructor-led training classes. E-learning is becoming an increasingly important part of higher education. This type of education can take place over the Internet, through which the instruction and educational content are delivered. In e-learning system, emotions are important in the classroom, we proposed a new e-learning system using biological signal that are affective to the learner that closer to learn in the classroom and focuses on affective aspects. Our system also integrates biological sensors to measure, detect, and analyse user emotions and also designed this would complement the effectiveness of e-learning.