

Analysis Of Course Delivery Involving Mayer's Design Principles in Learning Content

Yap Wei Li, Desiree

Faculty of Computing and Information Technology

INTI International University College

Many education institutions today are encouraging faculties to utilize the information technology in an effective manner in teaching and learning. By then, both the lecturers and students are involved in a different teaching and learning environment. We are experiencing the rapid growth of online learning but not much has been done with regards to the content materials used in the learning process. However, there is no doubt that research has shown that multimedia has been shown to be effective when designing contents for various courses. This paper presents a study that incorporates Mayer's (2001) design principles into learning materials and its impact on the student learning process. This paper also presents a comparison study among three different groups which involved the traditional classroom teaching using ordinary MS PowerPoint slides as teaching material, the traditional classroom teaching using the multimedia designed contents as teaching material, and an independent online learning environment using the multimedia designed content. The impact of both conventional and online approaches during the course delivery was observed and is discussed in this paper, including the students' behavior or their attitude. Students' understanding on the lecture was assessed using Pre-Test and Post-Test questions, and their perceptions towards each learning approach is presented.

Keywords: online learning, multimedia effects, design principles