



EXPLORING VISUALIZATION MODELS TO ELUCIDATE LEARNING CAPACITIES IN THE CONTEXT OF VISUAL HERMENEUTICS: A CASE STUDY OF ONLINE INSTRUCTIONAL ANIMATION

Terry Lucas

Universiti Malaysia Sarawak

Universiti Teknologi MARA

lterry@unimas.my

Ruslan Abdul Rahim

Universiti Teknologi MARA

ruslan@salam.uitm.edu.my

ABSTRACT

Online learning is becoming more prevalent throughout the years. At the same time, learners are using various technological devices to learn via the internet. One of the common ways of online learning is by watching videos from streaming sites such as YouTube. Some educational videos that are available online are presented in a form of instructional or expository animations. With the rise of instructional animations use for learning, it is essential to identify design characteristics of such animations. Hence, this paper focuses on the visual hermeneutic study of design characteristics of instructional and expository animations available on online streaming sites. Animation samples of the study are selected from established educational animation content creators on YouTube using several criterions. Aspects such as design characteristics and visual representations will be analysed and discussed in relation to the Cognitive Theory of Multimedia Learning principles and a characterisation system of expository animation. Based on these analyses, there are common characteristics and uniquely different approaches to creating successful online instructional and expository animations. By being able to identify and aware of these characteristics, educators and animation designers can improve the quality of visual content and instructional design to cater to their teaching and learning needs.

Key Words

Instructional animation, Expository animation, Visual representations, Design characteristics, Cognitive Theory of Multimedia Learning, Visual hermeneutics

INTRODUCTION

The growth of online learning has provided a positive disruption on the way people learn. There are numerous new technologies that can facilitate learning more effectively and more efficiently. The ways the new generation of learners acquire knowledge are quite different as compared to the ways in the past. These contemporary learners are learning using accessible devices such as tablet PCs and smart phones. In addition, access to the internet is widely available and affordable to the masses. Governments in developed and developing countries are encouraging their citizens to be proactive in acquiring new knowledge as part of their lifelong learning agenda. For example, in Malaysia, there is a push for online learning as an integral component for higher education and lifelong learning in the Ministry of Higher Education's 10 Shifts (*Malaysia Education Blueprint 2015-2025 (Higher Education)*, 2015). Even in Massive Open Online Courses (MOOC) and blended learning methods, instructional and expository videos and animations are incorporated as common supplementary