UNIVERSITI TEKNOLOGI MARA

EVALUATING STUDENTS' EMOTIONAL RESPONSE IN VIDEO-BASED LEARNING USING KANSEI ENGINEERING

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IT Project submitted in partial fulfillment
of the requirements for the degree of
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AUTHOR'S DECLARATION

I declare that the work in this IT Project was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as reference work. This IT Project has not been submitted to any other academic institution on non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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ABSTRACT

In less than ten years, a well-designed video-based online learning material can be a powerful learning tool that evokes students' positive emotions while using it. This rewards a valuable learning experience for all students. To enable the development of such learning materials, the knowledge of how design elements influence emotion should be continued so that we could engineer the emotion into video-based online learning materials. That is the main objectives of this research. The research was conducted using Kansei Engineering approach which has been adapted from the pioneer of KE, Prof. Dr. Mitsuo Nagamachi. Using 10 specimens of video obtained from YouTube, 55 Kansei Emotion Words (KW), and 32 evaluation subjects, this research performed evaluation experiment to assess students' emotional response to video-based online learning materials. Multivariate analysis were performed to the averaged evaluation result acquired from subjects to identify the semantic space for video-based online learning material for higher education and investigate the associated design elements to be used as a guide in designing video-based online learning material, which embeds target emotion in its design. The findings in this research reveal five pillars of Kansei semantic space of emotions for video-based online learning materials. Based on Factor Analysis, it reveals three main pillars; *professional-motivated*, *fun*, *joking-humorous* and two additional pillars; *deceptive* and *puzzled*. Other than that, this research also described design elements of video-based online learning materials that evoke specific emotions based on five pillars that identified after performed Partial Least Square Analysis. Although there are some limitations and constraints during the research are conducted, they have contributed little portion of knowledge to confirm some important emotions in an online learning environment particularly in video-based learning.

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