

Master's Thesis Topic Description

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1. Designing Guideline Instructional Video Courses with Emotion-Driven Motivational Models to Enhance Student Engagement

Massive Open Online Courses (MOOCs) primarily use videos as their primary instructional medium to deliver lectures [1]. Emotions play a significant role in learning [1]. However, this aspect is often overlooked by instructional video designers [1]. Creating a video lecture can be difficult and demands careful planning and execution [2]. Empirical research indicates that video production decisions influence student engagement in online educational videos [3]. The thesis topic aims to take advantage of the success of using motivational goal models by designing guideline instructional video design that can elicit emotional engagement among students. The following research questions will be addressed:

- i. RQ1: Can motivational goal models support design guideline instructional video courses, resulting in emotionally engaging student learning experiences?
- ii. RQ2: What emotions do students frequently express while watching online educational videos?

[1] Chen, C. J., Wong, V. S., Teh, C. S., & Chuah, K. M. (2017). MOOC videos-derived emotions. *Journal of Telecommunication, Electronic and Computer Engineering (JTEC)*, 9(2-9), 137-140.

[2] Chen, C. M., & Wu, C. H. (2015). Effects of different video lecture types on sustained attention, emotion, cognitive load, and learning performance. *Computers & Education*, 80, 108-121.

[3] Guo, P. J., Kim, J., & Rubin, R. (2014, March). How video production affects student engagement: An empirical study of MOOC videos. In *Proceedings of the first ACM conference on Learning@ scale conference* (pp. 41-50).

