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Re: Final Report for the research paper presented at International Conference on Research in Education and Science (IRCES 2017) on May 18-21, 2017 in Ephesus-Kusadasi, Turkey.

- A. Paper entitled: "Assessing the Effect of Designing Instructional Video Grounded on Cognitive Theory of Multimedia Learning on Students' Academic Achievement in Online Course"
- B. **Research problem:** This study assessed the effect of design instructional video based on the Cognitive Theory of Multimedia Learning (CTML), and the correlation between students' personal preferences (preferred learning styles and area of specialization) and their learning outcomes. Research questions:
 - a. How does instructional video designed based on CTML affect students' learning outcomes in the context of an online course?
 - b. How does video designed based on CTML affect students' perceived difficulty of the learning materials in an online course?
 - c. Is there a relationship between students' learning styles and learning outcomes during learning from educational video in an online course?
 - d. Is there a relationship between students' area of specialization and their learning outcomes during learning from educational video in an online course?
- C. **Research procedure:** A three-group pretest-posttest design was employed to assess whether there were significant differences in students' test scores after watching an instructional video in an online course.
- D. **Summary of findings:** The results of the ANCOVA analysis indicate that instructional design had a significant effect on students' learning outcome. This effect was demonstrated by the statistically significant differences in students' learning outcomes, with the highest scores achieved by students in the segmented and signaled video group and the lowest scores in the no segmentation and no signaling group. Moreover, results indicate that students' learning preferences and area of specialization related significantly and positively to their learning outcomes. These findings suggest that the use of educational video in online courses has the potential to improve students' learning outcome; however, it requires design manipulation. The results also emphasize the importance of rethinking the "one size fits all" approach in developing online course content and include consideration of the students' learning preferences and area of specialization to optimize their learning.

E. **Conclusions and recommendations:** This research project was presented and published in the proceeding of the International Conference on Research in Education and Science (ICRES). Upon returning from the conference I shared my conference experience with the C & I faculty. Additionally, I evaluated the feedback from my presentation and interaction with international colleagues to consider different innovative teaching strategies to my teaching and research.