

## Assignment 9 Discussion - Video Applications

Identify an instructional application that is especially appropriate for video. Give an example and discuss the strategies best used in utilizing video in a learning situation.

The instructional model I use in the basic skills courses is based on the Emporium model, which is one of the models for course redesign the National Center for Academic Transformation (NCAT) has suggested for innovative ways of teaching and learning with technology. This model consist of students spending class time on learning math by doing and less by listening class lectures. The classroom is converted into a learning center, where students use a web-based math program (i.e. ALEKS) to learn, practice, and master the course objectives with the assistance of tutors, the instructor, classmates and a wealth of instructional resources. Students learn the course content at their own pace and based on their individual needs since ALEKS assesses students' prior knowledge. In other words, students in the classroom are learning at different levels, which become quite challenging to facilitate assistance to each learner. In this learning environment, I have found appropriate and necessary adopting the instructional strategy of creating and using math videos to meet my students' needs.

ALEKS provides video lectures and animations to assist students for learning the course content. However, students have expressed dissatisfaction of how content is presented in these videos, which overuse math vocabulary that they often do not understand. In addition, the math process or algorithms shown in ALEKS' videos often lack details since the authors assumed students have mastered pre-requisite skills. For such reason, students prefer my methods for explaining content in layman terms, and probing questions to help them think and discover the answers for themselves. Therefore, I have realized the need to create videos using my teaching style to personalize course content and meet my students' needs. In addition, I have found necessary to create short video lectures for those students who still prefer learning from instructor's class lectures instead of the self-directed learning of the Emporium model.

I am also creating videos to demonstrate how to use math technology tools (e.g. graphic calculators, spreadsheets) and to make class announcements for those students who were absent to class. Promoting math awareness is one of my goals as a math educator and the use of videos is helping me to bring real-world examples into the learning process. Finally, I believe humor is one way to ease students' math anxieties, so I have found (but still searching for more!) several comical videos about mathematics for this purpose. Smaldino, Lowther, and Russell (2008) recognized that teachers should take advantage of the easiness and flexibility for creating videos to promote learning and meet students' needs. I have just started exploiting this instructional strategy to promote an active learning environment in my classroom. The sky is the limit!

### Reference

Smaldino, S., Lowther, D.L., & Russell, J. (2008). *Instructional technology and media for learning* Upper Saddle River, NJ: Pearson.