

On Demand Streaming Video in Self-Paced Lab Environments

Abstract

Many studies have been conducted showing the benefits of streaming video in a classroom setting. This study attempts to determine if these benefits extend to streaming video in a self-paced technical lab environment. This is a quasi-experimental study that has extended over 2 years. In the Spring of 2016, students completing AVT 206 were surveyed about their perceptions of mastery and difficulty regarding aircraft sheet metal repair. The following Spring of 2017, the same lectures, slide presentations, handouts, assignments, and tests were used again. However, this time, the author made available approximately 5 hours of detailed streaming videos showing each step of the processes covered in lab. At the end of the class, the students were given the same survey about their perceptions of mastery and difficulty. Student responses to the survey will be presented, as will be other data, including number of hours spent in the lab, degree of mastery as related to laboratory grades, and anecdotal data.

At the time of writing this abstract, the data has been collected. It has not yet been analyzed. Therefore, no results can yet be shared. However, these results will be shared at the time of the presentation. Statistical methods including FANOVA will be used to present data in a meaningful manner.