

Learning in the Digital Era

Arbuckle, Sarah (School: Ames High School)

Cyr, Amy (School: Ames High School)

Digital learning tools are becoming increasingly relevant in the classroom as a growing number of schools consider their potential to reduce paper usage and spending. In recent years, an area high school has transitioned its textbooks to an online format, as well as turned to the “flipped classroom” method of teaching courses. This project will help students, as well as school personnel, gain an understanding of how students’ overall comprehension differs when taught information by way of the flipped classroom method and in a traditional classroom setting. Based on prior knowledge and testing, a hypothesis has been formulated stating that flipping a classroom will negatively affect the way students interpret and comprehend information, thus causing a decrease in test scores. In order to test this hypothesis, student volunteers were collected to partake in a lecture. Half of the student volunteers viewed the lecture in video format without an instructor present. The other half of the student volunteers attended the lecture in person. Both lectures were identical in time, content, and instructor to serve as a control variable. Both groups completed identical assessments over the lecture.