Education During a Pandemic: Exploring the Effectiveness of Synchronous versus Asynchronous E-learning from a Teacher's Perspective

Friedman, Carly (School: Plainview-Old Bethpage John F. Kennedy High School)

Due to the Covid-19 pandemic, many school districts were forced to shift to one of three different E-learning models: asynchronous, synchronous, or hybrid. The present study examined how the shifts in instruction from in person to online models has impacted the learning environment on three main educational components: ability to obtain necessary resources, job morale and satisfaction, and quality of the student-teacher interaction. The study had three main hypotheses: (1) regardless of current educational platform, teachers will report a significant decrease in all three components of the quality of the educational environment, (2) teachers will report the most significant decrease in the quality of the student-teacher interaction component, and (3) teachers' grade level will significantly impact the effectiveness of the educational platform. A nationwide sample of teachers (n=296) responded to 15 questions that measured perceptions of their teaching qualities on the 3 targeted variables from before the pandemic and today. Paired sample t-tests affirmed the greatest decrease in the learning environment occurred in the quality of the student-teacher interactions. Results additionally indicated that the hybrid model was found to cause the most significant decrease in all three educational components. With regards to grade level, high school teachers were most negatively impacted by the hybrid model while middle school teachers reported their greatest decrease in the synchronous model. As online education is the learning style of the future, the findings from the current study will help educators better understand how to effectively implement e-learning instruction and highlight key areas that need to be addressed in order to maximize this new style of virtual education.

Awards Won: