Chapter 7
The Pandemic Influence of Educational Technology, Student Teacher Attachment, and Language Instruction on Value of Education:
A Quantitative Approach

John Rugutt
Illinois State University, USA

Caroline C. Chemosit
http://orcid.org/0009-0008-3438-300X
Illinois State University, USA

Philip K. Kaloki
Tarrant County College, USA

ABSTRACT

This study used ANOVA and standard multiple linear regression to address the study research questions with a sample of 450 elementary and secondary school students. The measures used in the study assessed school culture elements. Regression results indicate that the overall model significantly predicts student value of education, R2 =.217, R2adj = .206, F (4, 370) = 20.29, p<.001 and the model accounted for 21.7% of variance in student value of education (SVE). Student teacher attachment

DOI: 10.4018/979-8-3693-7645-4.ch007

and learning equity (STALE), educational technology usage (ETU), and English language arts (ELA) were significant predictors of SVE while gender and school level were not. STALE, ETU, ELA, and SVE Cronbach alpha reliability coefficients were .70, .80, .73, and .76 respectively. Elementary students had a higher SVE than secondary school students. ANOVA results indicated significant main effect for school level, F (1, 403) = 24.99, p < .001, η2 = 0.06. The study concluded with a discussion of the importance of ETU, STALE, ELA, and school level have on SVE.

INTRODUCTION

With the effects of a pandemic still sweeping throughout the world, school districts across the nation and around the world continue to grapple with various remote learning models leaving many education stakeholders having to choose between synchronous, asynchronous, or a combination of both (blended/hybrid). The underlying questions that call for further research, particularly by education experts under these conditions of learning and more so in the midst of the effects of a pandemic include but not limited to: 1) whether there is a significant difference in overall learning for students who are participating in either synchronous live instruction versus those students receiving asynchronous instruction, or blended instructional format, 2) whether there a significant difference in the types of digital tools used to support learning, and 3) whether there is a significant difference in the types of feedback given (formative, summative, in person, digital) in either of the three instructional delivery formats. The call for further research is needed to identify more effective instructional delivery models that result in greater learning while at the same time preventing students from achieving below proficiency levels.

Whether learning a new skill or reinforcing an existing one, educators across the globe are building their technology skills to be effective in remote learning environments and want to know how to meet the needs of their students through effective approaches that are grounded in sciences and research. Regardless of the developmental stage a student is at, reading instruction and intervention must be explicit, systematic, and evidence based (Hindman, Morrison, Connor, & Connor, 2020). While educational systems have been put to the test during the pandemic, there is a growing need to provide educators with relevant and essential research to ensure high-quality instructional delivery methods, and interventions that are supported by cognitive science and student overall learning.

According to the U.S. Department of Education (2017), American society is growing increasingly technological in both how individuals interact and in how individuals learn. Modern social life is comprised of networks of people that communicate, teach, and learn through the usage of advanced tools such as smartphones