Discussant Comments

Research Theme: Technology Applications in CTE Education

Influence of Gender and Computer Gaming Experience in Occupational Desktop Virtual Environments: A Cross-Case Analysis Study

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A Critique by Janet Zaleski Burns, Ph.D., Georgia State University

During the 1980’s and 1990’s, virtual reality was touted as a new and emerging application. However, virtual environments have been around in some form for almost as long as the entire computer graphics field. Virtual reality is a realistic environment that exits not in physical matter, but in digital bits. It provides a highly interactive and “safe” environment in which to practice potentially dangerous exercises. Most recently virtual reality games have captivated children and youth.

While the application of desktop virtual environments (DVE’s) to education seems obvious, we need to discern the best ways to take advantage of any technological advance to improve what we do as Career and Technical (CTE) educators. We need to be thoughtful as we add technology to CTE programs, and not make up how to use the technology as we go along. I applaud this research team for examining the learners’ response and ability to use this desktop virtual reality (DVR) technology to master course material.

This research poses three important questions and seeks to add to the body of knowledge on the effects of gender and prior computer gaming experience on learning performance. Two content areas were included in this study; surgical technology and policing. Cross case synthesis was performed using four previous studies following Yin’s (2009) research methods.

The article is well developed and offers recommendations appropriate to CTE and DVE research. In addition to submitting this piece of research to CTE publications, I recommend that instructional technology (IT) journals be considered as well.

For an interesting practitioner story about the use of DVE technology in police training, click on the link below. This is just one of many examples I found, and one can’t help but wonder if the learners’ capabilities to master the material using this method was considered.