

Information Technology Evaluation & Research: Past Trends and Future Needs

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Abstract: A content analysis of SITE Evaluation & Research submissions for 2003 – 2005 is used as the basis for discussion of past trends and future horizons in information technology and teacher education scholarly inquiry. Issues such as the low incidence of “strong evidence” research designs, the growing importance of accountability, the dominance of online teaching and learning studies, and the growth of professional development research, are analyzed with respect to probable cause. Guidelines from professionals in the field and governmental agencies are proposed as a basis for targeting studies on topics with great potential and/or great demand. Innovative research approaches are discussed before the paper concludes, with a brief list of annotated sources to assist towards manuscript preparations.

Introduction

The online Education and Information Technology Library (AACE, 2005) contains 994 publications using the words ‘evaluation’ or ‘research’ along with information technology and teacher education. Given this diverse representation spanning many disciplines, it is difficult to make the case that evaluation and research represent a specialized field for the Society of Information Technology and Teacher Education; and yet, several trends can be identified that have persisted through recent years and/or are destined to emerge in the future. Identification of evaluation and research trends, along with rationales for their significance, are the purpose of this paper.

Trends in Evaluation and Research

A content analysis of publication trends in evaluation and research for SITE 2004 versus SITE 2003 (Knezek, 2004) revealed that the most popular topics in this area were not necessarily those featured in U.S. national policy guidelines. The 2004 analysis concluded:

One might expect research on information technology and teacher education to be influenced by recent “calls for accountability and ‘scientifically-based research’ to inform educational policy in North America and Europe” (Davis & Bull, 2003, p. i). Indeed, as shown in Table 1, a simple content analysis of the proceedings titles in the area of Evaluation and Research for 2003 versus 2004 revealed that papers with a major focus on accountability (+3%) and the U.S. No Child Left Behind Act (U.S. Dept. of Ed., 2002) (+3%) have increased in their proportions of the total mix of research and evaluation papers since 2003. Nevertheless, the total number of papers in this area (4, or 5 if achievement is also included) remains quite small for 2004.

Online teaching and learning (+6%, 9 papers total) appears to be the category with the largest increase while papers focusing on overcoming barriers to technology integration (-6%) show the