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Research Highlights in Technology and Teacher Education 2009

Edited by
Cleborne D. Maddux



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Research Highlights in Technology and Teacher Education 2009

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Research Highlights in Technology and Teacher Education 2009
(ISBN # 1-880094-74-6) is published by the Society for Information Technology & Teacher Education (SITE),
an international, educational, nonprofit organization.
Published by: SITE, PO Box 1545, Chesapeake, VA 23327-1545, USA

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FOREWARD

It has been a pleasure, a privilege and an honor to serve as the editor for this first collection of outstanding articles entitled *Research Highlights in Technology and Teacher Education 2009*. All members of the Society for Information Technology and Teacher Education (SITE) owe a debt of gratitude to Ian Gibson, Gerald Knezek, Gary Marks, members of the volume's special review board, and the entire leadership of SITE, who recognized the need for a highly selective and rigorously refereed collection of articles dealing with technology and teacher education. Without their vision and their support, the present volume would never have become a reality.

Authors whose articles have been included in this volume should be proud of the accomplishment, since all articles have been subjected to the most stringent selection and development procedures that we could design and implement. Some details about these procedures may be instructive.

Everyone who submitted a full paper to the SITE 2009 International Conference was invited to also submit the paper for consideration of inclusion in *Research Highlights in Technology and Teacher Education 2009*. One hundred twenty-three papers were submitted. All were sent for blind review to at least two experienced reviewers in the field, and all were read by me. (The list of this distinguished board of reviewers can be found elsewhere in this volume.) Reviewers were asked to subject all papers to the most rigorous and thorough critique possible and to make a recommendation for acceptance as is, acceptance with revision, or rejection. The importance of full and complete recommendations for revision was emphasized for those papers accepted with revision. All reviews were returned to me. No papers were given acceptance as is, and all papers included in this volume were accepted pending required revisions. For those accepted at this stage, I consolidated the critiques and added my own recommendations, which I forwarded by email to all authors. Revisions of those articles given provisional acceptance were returned to me. I read all revisions to determine if the recommendations of reviewers had been implemented. I sometimes asked members of the board of reviewers to also read them and give me another recommendation. The majority of papers required at least two revisions, although sometimes several more were required. Ultimately, 40 papers were given final acceptance, making an overall acceptance rate of approximately 33 percent.

I offer my congratulations and my gratitude to the special review board and to the authors of all the manuscripts submitted for consideration of publication in this book. I am impressed with the breadth and depth of work that is being done in our field by members of our society, and I submit this work to you in the clear conviction that you will find it as informative and as inspiring as I have found it.

April 8, 2009

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PREFACE

**Defining the Future of Teacher Education:
Highlighting Research in
Technology and Teacher Education**

The year 2009 represents the twentieth anniversary of the Society for Information Technology and Teacher Education (SITE). For each of those twenty years, SITE members have, together, constituted one of those small and thoughtful groups that Margaret Mead memorialised in her now famous quotation on change ...

Never doubt that a small, group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has.

Margaret Mead (1901-1978)
US Anthropologist, Author

Over the past twenty years, SITE has driven change in the learning, leading, and teaching professions through the development and dissemination of cutting edge research describing the impact of technology on these endeavours. SITE members have also 'built' new knowledge as they explored new learning phenomena, and, in the process, have collaboratively created a global momentum for change that now undergirds learning events around the world.

These research and development activities, and the descriptions of their impact on the profession have been archived in conference memories and in hard copy and digital repositories that have been designed in a way that serves two purposes. The first, to improve learning, redefining it in ways appropriate for a technology-rich, global and diverse 21st century, and creating an inexorable impact on the associated process of teacher preparation for the new millennium. The second, to support the 'professionalisation of the profession' by providing a safe, supportive, and cutting edge environment wherein SITE members become productive members of the academy, having access to high quality and accessible peer reviewed processes of disseminating their work in the context of a well regarded learned society.

Throughout these first two decades of its influence, SITE, through the work of its members, has described the evolution of thought related to the infusion and integration of learning, knowledge building, and communications technologies into the traditional workplace of education. Further, SITE researchers have recognized the subtle but inevitable transformation and redefinition of the way we *do* learning, *prepare* for it, and *organize* for it, as a result of the impact of these technologies on the traditional practices of learners, leaders, and teachers.

The combined impact of these research activities has been recorded and archived at a variety of levels. They are available to interested publics via peer reviewed conference proceedings, hard copy and digital refereed journals, and, in combination with other AACE conference artifacts, through the digital Ed/IT library. Together, these resources have permeated the academic scene and clearly changed the way the larger community has thought about, and talked about education.

As SITE has evolved with the times over the last two decades, so has the means by which SITE research has been communicated. Periodically, new channels of communicating have been adopted to meet changing needs and changing technologies. An electronic journal has been developed from this evolving need. New communication technologies have been introduced to the conference process and dramatically impacted the way conference activities have been made available to larger publics in asynchronous and synchronous ways. The new SITE website *practices what we have all preached* for the last two decades and made possible a greater sense of the learning community potential of the 'friendly society'. This new publication follows in that tradition.

To continue the highly regarded practice of reporting on and disseminating SITE research activities, SITE leaders have recognized the changing accountability needs of the academy and single-mindedly resolved to continue providing SITE members with vehicles that support the academic standing and career development of its members by making available yet another outlet for SITE member research. Consequently, the high academic standards of SITE publications (multiple, blind, external, stringent refereeing) were extended to a new medium: an annual edited book focused upon the research highlights in technology and teacher education for a given year.

In an era of increasing accountability and external regulation of academic activity, proactive thinking by SITE leaders recognised the need to supplement the avenues available to its members in supporting their careers and it is this new publication that does that. Through a rigorous process of selection and review, the contents of this first edition of *Research Highlights in Technology and Teacher Education* represent SITE's response to the need for evolving external accountability in the profession.

Responding to changing needs has been the purpose and intent of SITE from the beginning. This new publication is an example of that traditional SITE responsiveness. When you have a chance to review the contents herein, you will be moved to join with me in thanking the editor of this new publication for his continual focus on quality, completeness, and thoroughness. In proactively volunteering his time and his considerable expertise in editing and leading publications to print, Cleb Maddox represents all that is key to the culture of SITE. While it is clearly a friendly society, SITE is also a society that learns together and that shares that learning unselfishly. Cleb is a champion of those values and should be congratulated at every turn for representing the ideals that SITE has been founded upon, and for bringing yet another high quality academic resource to the profession.

For those who pride themselves on being part of forward and progressive organisations, being a member of SITE represents connection to a global cutting edge society that continually reviews its processes and its directions in order to lead positively into a future it has helped design. Developments this year alone usher in the beginning of a new era in SITE activity. Not only is this society spreading its wings in response to calls for a more global presence through increasing its footprint around the world, it guarantees its ability to respond proactively and energetically by including new generations of SITE leaders into current initiatives, innovative practices, and futures planning. Further, as this new publication confirms, SITE backs up these ventures by ensuring that the foundation of academic respectability that it began with, remains responsive and intact.

Preface: Defining the Future of Teacher Education

Professor Ian W. Gibson, Ph.D.

Immediate Past President, Society for Information Technology and Teacher Education (SITE)
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