Book Series

Research, Innovation & Methods in Educational Technology

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Chrystalla Mouza, *University of Delaware*; Nancy C. Lavigne, *University of Delaware*

This series was formerly entitled "Research Methods for Educational Technology"

The volumes in this series concentrate on key theoretical and foundational issues, empirical investigations, and methodological approaches in educational technology. The focus is on emerging technologies and their role in promoting innovative models of teaching, learning and research in PreK-16 settings. Volumes can focus on educational technology in any disciplinary or inter-disciplinary content area. For this series, research is defined broadly to include basic research, applied research, design research, evaluation, action research, and instructional design and policy research. All volumes should take the reader well beyond the content in introductory textbooks through the use of examples, illustrations, and models in educational technology. Readers will generally be scholars, educators, policy makers, graduate students, and practitioners in educational technology and other related fields.

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- Research on Technology in English Education
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- Constructivist Instructional Design (C-ID)
- Evaluating Electronic Portfolios in Teacher Education
- Framing Research on Technology and Student Learning in the Content Areas
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Preparing Pre-Service Teachers to Teach Computer Science
Models, Practices, and Policies

Chrystalla Mouza, University of Delaware; Aman Yadav, Michigan State University; Anne Ottenbreit-Leftwich, Indiana University

2021. Paperback 978-1-64802-456-6 $45.99. Hardcover 978-1-64802-457-3 $85.99. eBook 978-1-64802-458-0 $65.

Computer science has emerged as a key driver of innovation in the 21st century. Yet preparing teachers to teach computer science or integrate computer science content into K-12 curricula remains an enormous challenge. Recent policy reports have suggested the need to prepare future teachers to teach computer science through pre-service teacher education programs. In order to prepare a generation of teachers who are capable of delivering computer science to students, however, the field must identify research-based examples, pedagogical strategies, and policies that can facilitate changes in teacher knowledge and practices.

The purpose of this book is to provide examples that could help guide the design and delivery of effective teacher preparation on the teaching of computer science.

This book identifies promising pathways, pedagogical strategies, and policies that will help teacher education faculty and pre-service teachers infuse computer science content into their curricula as well as teach stand-alone computing courses. Specifically, the book focuses on pedagogical practices for developing and assessing pre-service teacher knowledge of computer science, course design models for pre-service teachers, and discussion of policies that can support the teaching of computer science. The primary audience of the book is students and faculty in educational technology, educational or cognitive psychology, learning theory, teacher education, curriculum and instruction, computer science, instructional systems, and learning sciences.

CONTENTS: Dedication. Acknowledgements. Introduction: Preparing Pre-Service Teachers to Teach Computer Science, *Chrystalla Mouza, Aman Yadav, and Anne Ottenbreit-Leftwich.* **PART I: PEDAGOGICAL PRACTICES FOR DEVELOPING AND ASSESSING PRE-SERVICE TEACHERS' KNOWLEDGE OF COMPUTER SCIENCE.** Active Learning Techniques for Computing Education, *Cazembe Kennedy, Eileen T. Kraemer, and Lisa C. Benson.* Pre-Service Teachers' Beliefs, Confidence, and Interest in Computer Science Education, *Jung Won Hur.* Exploring Factors That Influence Preservice Teacher Integration of Educational Robotics and Programming in Educational Practice, *Nikleia Eteokleous and Raphaela Neophytou.* Eliciting Pedagogical Content Knowledge for Computer Science Teaching, *Aleata Hubbard and Yvonne Kao.* **PART II: COURSE DESIGN MODELS FOR PREPARING PRE-SERVICE TEACHERS TO TEACH COMPUTER SCIENCE.** Creating Change Agents: A Teacher Preparation Model That Prepares All Teachers to Facilitate Computer Science Concepts, *Chery Lucarelli, Jill Long, Jennifer Rosato, Christa Treichel, & Heather Benedict.* Teaching Teachers: A Computer Science Methods Course, *Michelle Friend.* Redesigning Educational Technology Coursework to Foster Pre-Service Teacher Learning of Computational Thinking in Content Area Instruction, *Hui Yang and Chrystalla Mouza.* Preparing Secondary Education Mathematics Teacher Candidates for AP Computer Science Principles: A Two-Course Design Model, *Rebecca Odom-Bartel, Jeremy Zelkowski, and Jeff Gray.* **PART III: UNIVERSITY AND STATE POLICIES FOR PREPARING PRE-SERVICE TEACHERS TO TEACH COMPUTER SCIENCE.** Using a Coaching Model to Support Computer Science Professional Development for Education Faculty Jennifer Rosato, *Heather Benedict, Chery Lucarelli, Jill Long, and Christa Treichel.* Building and Expanding the Capacity of Schools of Education to Prepare and Support Teachers to Teach Computer Science, *Aman Yadav, Leigh Ann Delyser, Yasmin Kafai, Mark Guzdial, and Joanna Goode.* Understanding K–12 Computer Science Education at the State Level, *Jeffrey Xavier, Rebecca Zarch, Sarah T. Dunton, Anne T. Ottenbreit-Leftwich, and Michael Karlin.* Teacher-Focused Policies to Broaden Participation in K–12 Computer Science Education in the United States, *Megean Garvin, Katie A. Hendrickson, Sarah T. Dunton, Jennifer Zinth, and Lynn T. Goldsmith.* Author/Editor Biographies.

Research on Technology in English Education

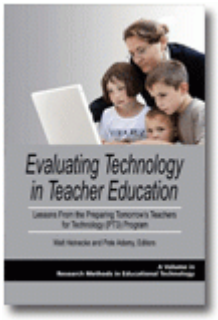
Carl A. Young, North Carolina State University; Sara Kajder, Shady Side Academy

2013. Paperback 9781623960858 $45.99. Hardcover 9781623960865 $85.99. eBook 9781623960872 $65.

This book brings together the voices of leading English Education researchers who work to offer views into the changing landscape of English as a result of the use of digital media in classrooms, out of school settings, universities and other contexts in which readers and writers work. But, as in most useful texts, the purpose is more nuanced and far reaching than simply offering a glimpse into where we currently find ourselves as a field. In sum, the collection brings together and interweaves what we are coming to know and understand about teaching English within a shifting digital landscape as well as the implications for teacher education and the discipline of English Education specifically.

The intended audience for this particular book is English educators, doctoral candidates in the field of English education, researchers and scholars in the field, and English language arts teachers – especially those interested in the impact digital technologies can have in our field.

CONTENTS: Introduction, *Carl A. Young and Sara Kajder.* **PART I: TPACK AND ENGLISH EDUCATION.** Developing Technological Pedagogical Content Knowledge Through English Teacher Research and a Pedagogy of Multiliteracies, *Troy Hicks.* Scaffolding the TPACK Framework in Reading and Language Arts: New Literacies, New Minds, Hiller Spires, *Lisa Hervey, and Tanya Watson.* Placing Technologies in Preservice English Teacher Reflection: Connecting Reflective Practice and TPACK, *Melanie Shoffner.* **PART II: ONLINE READING COMPREHENSION AND LITERATURE DISCUSSION.** TPACK and New Literacies of Online Reading Comprehension: Preparing Today's Teachers for Tomorrow's Readers, *J. Gregory McVerry.* Learning Synchronous Chat Technology by Design in the High School English Classroom, *Susan Groenke and Michelle Grothaus.* **PART III: VIRTUAL WORLDS AND ONLINE ROLE PLAY.** Virtual Worlds for Literary Study: Technological Pedagogical Content Knowledge in The Village of Umuofia and Other Literary Worlds, *Allen Webb.* TPACK Perspective on Learning to Engage in Dialogic Argument Through Participation in Online Role-Play in the English Classroom, *Richard Beach and Candance Doerr-Stevens.* **PART IV: DIGITAL WRITING THROUGH VIDEO AND WEBLOGS.** Negotiating the Privilege of Print With the Affordances of Digital Video Authoring, *Jamie Myers.* Teacher Knowledge-in-Action: Enacting Multimodal Literacy Pedagogy for DV Composing, *Suzanne Miller, Keith Hughes, and Merridy Knips.* Blogversing With Fifth Graders: The Intersection of Blogging, Conversations, and Writing, *Ewa McGrail and Anne Davis.* **PART V: SOCIAL NETWORKS AND CONTENT AREA LEARNING.** Repurposing Social Networking Tools for the Classroom: An Examination of Twitter's Potential for Enhancing ELA Content Knowledge, *Carl A. Young and Naomi Kraut.* About the Authors.



Evaluating Technology in Teacher Education

Lessons From the Preparing Tomorrow's Teachers for Technology (PT3) Program

Walt Heinecke, University of Virginia; Pete Adamy, University of Rhode Island

2010. Paperback 978-1-60752-134-1 $45.99. Hardcover 978-1-60752-135-8 $85.99. eBook 9781617350856 $65.

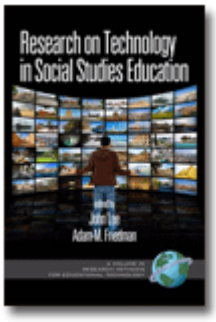
Overall we come away from this project with a renewed sense of the complexity of evaluating the implementation and impact of technology in teacher education. In the post-PT3 period the federal government turned to large-scale experimental and quasi-experimental evaluations of educational technology but these have produced little in the way of understanding what types of technology work in various content areas under various conditions. PT3 and its approach to evaluation can be viewed as the pioneering period of educational technology evaluation in teacher education. It was a time when evaluators were just beginning to develop appropriate standards that could be used as evaluation criteria. It was a time when the accumulated wisdom of the evaluation field with regards to the primacy of mixed methods and multiple indicators of outcomes was just beginning to take hold. PT3 evaluators understood the importance of treading the line between summative and formative evaluation, and the relationship of evaluation to the improvement of educational practice.

In a world where the policymakers now clamor for simple quantitative evaluations linking teacher preparation to pupil achievement scores, we are reminded that the causal chain from teacher preparation to in-service performance and student achievement is fraught with externalities, complexities and a less than equal playing field. Collectively we still have not figured out how technology may be adding value to education beyond any potential impact on superficial standardized test scores. We have as a nation, ignored the call of cognitive psychologists who in 2000 called for a new frame of reference for learner-centered, community-centered , assessment-centered and content-centered educational processes. They understood that the high stakes accountability systems hinder educational innovation and the release of technology's potential to unlock new ways of knowing and learning.

Looking back now on the accomplishments of the PT3 program within our current political context, we see a need for more nuanced evaluation models that examine the relationship between pedagogy and technology integration, with a realization

that teacher preparation programs will vary in their approaches to both. Some will focus on skills-based approaches, others on the relationship between pedagogical content knowledge and technology integration. The PT3 program served as an important incubator and test-bed of appropriate evaluation practice; we are already looking back at the program for lessons on how to move forward. We hope this volume may serve as a reminder of lessons for the future.

CONTENTS: Series Editors' Preface, *Walt Heinecke and Pete Adamy.* Risk- Taking in Schools of Education: Teaching New Tricks to Old Dogs, *Saul Rockman.* Transforming Teacher Preparation Through Technology, *Donna M. Mertens.* Evaluating the Quality and Impact of a Faculty Development Model: The SUNRAY Experience, *Elizabeth Byrom.* Using the Technology Learning Cycle as a Framework for Teacher Preparation, Faculty Professional Development, and Evaluation, *Jane L. Howland, Judy C. Pfannenstiel, Laura Wedman, and Rose Marra.* Lessons in the Evaluation of Educational Technology Programs: A Meta-Evaluation of 1999-2000 PT3 Catalyst Projects, *Walter Heinecke and Kirk Knestis.* The Appalachian Rural Teacher Technology Alliance, *Susan Renc-Walker, Lisa Shuskey, and Richard Riedl.* High-Tech Mentoring: Evaluating the Impact of a PT3 Project, *Debra Sprague, Jane Cooper, and Cynthia Pixley.* Captured Matter: Using Web-Based Informatics for Evaluation of Educational Reform Projects, *Matthew J. Stuve, Jerrell C. Cassady, Laurie J. Mullen, and Jody S. Britten.* The Evaluation of Project START: Formative Evaluation and Multimethod Design, *Andrew Hess and Cheryl Lani Juárez.* The Integration of Evaluation into the University of Pittsburgh PT3 Project, *Shirley Campbell, Brian Yoder, and R. Tony Eichelberger.* The Influence of PT3 Initiatives on Methods Courses and Field Experiences, *Drew Polly, Cliff Mims, Fethi Inan, and Craig Shepherd.* About the Authors.



Research on Technology in Social Studies Education

John Lee, North Carolina State University; Adam M. Friedman, Wake Forest University

2009. Paperback 978-1-60752-278-2 $45.99. Hardcover 978-1-60752-279-9 $85.99. eBook 978-1-60752-294-2 $65.

Despite technology's presence in virtually every public school, its documented familiarity and use by youth outside of school, and the wealth of resources it provides for teaching social studies, there has been relatively little empirical research on its effectiveness for the teaching and learning of social studies. In an effort to begin to fill this gap in research literature, this book focuses on research on technology in social studies education. The objectives of this volume are threefold: to describe research frameworks, provide examples of empirical research, and chart a course for future research endeavors. Accordingly, the volume is divided into three overarching sections: research constructs and contexts, research reports, and research reviews.

The need for research is particularly acute within the field of social studies and technology. As the primary purpose of social studies is to prepare the young people of today to be the citizens of tomorrow, it is necessary to examine how technology tools impact, improve, and otherwise affect teaching and learning in social studies. Given these circumstances, we have prepared this collection of research conceptualizations, reports, and reviews to achieve three goals.

1. Put forward reports on how research is being conducted in the field
2. Present findings from well-designed research studies that provide evidence of how specific applications of technology are affecting teaching and learning in social studies.
3. Showcase reviews of research in social studies

It is with this framework that we edited this volume, Research on Technology and Social Studies Education, as an effort to address emerging concerns related to theorizing about the field and reporting research in social studies and technology. The book is divided into four sections. The first section of the book includes three descriptions of research constructs and contexts in social studies and technology. The second section is focused on research reports from studies of student learning in social studies with technology. The third section contains research reports on teachers' pedagogical considerations for using technology in social studies. In the fourth and final section, we present work that broadly reviews and critiques research in focused areas of social studies and technology. This volume contains twelve chapters, each of which focuses on social studies content and pedagogy and how the field is affected and enhanced with technology. The volume includes research and theoretical works on various topics, including digital history, digital video, geography, technology use in the K-12 social studies classroom, and artificial intelligence.

CONTENTS: SECTION 1: RESEARCH CONSTRUCTS AND CONTEXTS. More to Follow: The Untapped Research Agenda in Social Studies and Technology, *John K. Lee.* Using the Affordances of Technology to Develop Teacher Expertise in Historical Inquiry, *John W. Saye and Thomas Brush.* Student-Created Digital Documentaries in the History Classroom:

Outcomes, Assessment, and Research Design, *Thomas Hammond and Bill Ferster.* Conceptual Change and the Process of Becoming a Digital History Teacher, *Philip E. Molebash, Rosemary Capps, and Kelly Glassett.* **SECTION 2: RESEARCH ON STUDENTS' LEARNING IN SOCIAL STUDIES WITH TECHNOLOGY.** Student and Teacher Perceptions of the WebQuest Model in Social Studies: A Preliminary Study, *Phillip J. VanFossen.* Multimedia-Based Historical Inquiry Strategy Instruction: Do Size and Form Really Matter? *David Hicks and Peter E. Doolittle.* **SECTION 3: RESEARCH ON TEACHERS USING TECHNOLOGY IN SOCIAL STUDIES.** If You Build It, Should I Run?: A Teacher's Perspective on Implementing a Student-Centered, Digital Technology Project in His Ninth-Grade Geography Classroom, *Sonja Heer Yow and Kathleen Owings Swan.* Technology Integration: The Trojan Horse for School Reform, *Cheryl Mason Bolick.* The Effect of Teachers' Conceptions of Student Abilities and Historical Thinking on Digital Primary Source Use, *Adam M. Friedman.* **SECTION 4: RESEARCH REVIEWS.** Utilizing the Power of Technology for Teaching with Geography, *Tina L. Heafner.* Artificial Intelligence in the Social Studies, *Daniel W. Stuckart and Michael J. Berson.* Digital History: Researching, Presenting, and Teaching History in a Digital Age, *Fred Koehl and John K. Lee.*

Constructivist Instructional Design (C-ID)
Foundations, Models, and Examples

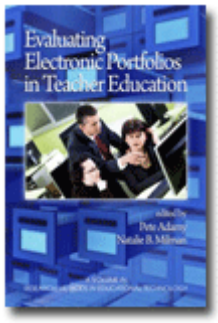
Jerry W. Willis, Manhattanville College

2009. Paperback 978-1-930608-60-3 $45.99. Hardcover 978-1-930608-61-0 $85.99. eBook 9781607522577 $65.

This book is about emerging models of design that are just beginning to be used by ID types. They are based on constructivist and chaos (non-linear systems or "soft systems") theory.

This book provides constructivist instructional design (C-ID) theorists with an opportunity to present an extended version of their design model. After an introductory chapter on the history of instructional design models, and a chapter on the guiding principles of C-ID, the creators of six different C-ID models introduce and explain their models. A final chapter compares the models, discusses the future of C-ID models, and discusses the ways constructivist designers and scholars can interact with, and work with, instructional technologists who use different paradigms.

CONTENTS: Preface. **SECTION I: THE MANY FOUNDATIONS AND FACES OF INSTRUCTIONAL DESIGN.** Three Trends in Instructional Design, *Jerry Willis.* Instructional Design: Is it Time to Exchange Skinner's Teaching Machine For Dewey's Toolbox? *Karin Wiburg.* Constructivism, Instructional Design, and Technology: Implications for Transforming Distance Learning, *Maureen Tam.* Foundations of Instructional Design: What's Worth Talking About and What is Not, *Jerry Willis.* Constructivism In Instructional Design Theory, *Frank Dinter.* Considering the Philosophies of Wittgenstein, Dewey, and Rorty as Potential Foundations for C-ID, *Jerry Willis.* **SECTION II: THE FAMILY RESEMBLANCES OF C-ID.** Emergent Design and Learning Environments: Building on Indigenous Knowledge, *D. Cavallo.* Fast Prototyping as a Communication Catalyst for E-Learning Design, *Luca Botturi, Benedetto Lepori, and Stefano Tardini.* Conducting Research on Practice, *Virginia Richardson.* The Use of Participatory Design in the Implementation of Internet-Based Collaborative Learning Activities in K-12 Classrooms, *Marcos Silva and Alain Breuleux.* Agency of the instructional Designer: Moral Coherence and Transformative Social Practice, *Katy Campbell, Richard Schwier, and Richard Kenny.* Constructivist Underpinnings in Donald Schön's Theory of Reflective Practice: Echoes of Nelson Goodman, *Elizabeth Anne Kinsella.* **SECTION III: R2D2 AND OTHER C-ID MODELS**. Basic Principles of a Recursive, Reflective Instructional Design Model: R2D2, *Jerry Willis.* A General Set of Procedures for C-ID: R2D2, *Jerry Willis.* Design as Knowledge Construction: Constructing Knowledge of Design, *Katherine Cennamo.* From Three-Phase to Proactive Learning Design: Creating Effective Online Teaching and Learning Environments, *Rod Sims.* Design-Based Research and Technology-Enhanced Learning Environments, *Feng Wang and Michael Hannafin.* Appreciative Instructional Design (AID): A New Model, *Karen E. Norum.* **SECTION IV: C-ID IN PRACTICE: EXAMPLES FROM THE FIELD.** Constructivist Instructional Design: Creating a Multimedia Package for Teaching Critical Qualitative Research, *Brandie Cólon, Kay Ann Taylor, and Jerry Willis.* A Cervical Cancer CD-ROM Intervention for College-Age Women: Lessons Learned From Development and Formative Evaluation, *Alexandra Evans, Elizabeth Drane, Karl Harris, and Tara Campbell-Ray.* From Pedagogy to Technagogy in Social Work Education: A Constructivist Approach to Instructional Design in an Online, Competency-Based Child Welfare Practice Course, *Gerard Bellefeuille, Robert R. Martin and Martin Paul Buck.* About the Authors.



Evaluating Electronic Portfolios in Teacher Education

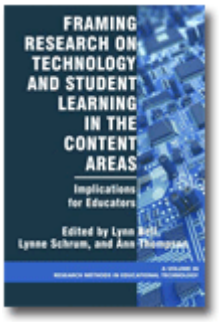
Pete Adamy, University of Rhode Island; Natalie B. Milman, The George Washington University

2009. Paperback 978-1-60752-031-3 $45.99. Hardcover 978-1-60752-032-0 $85.99. eBook 9781607528630 $65.

While Research on the effectiveness of electronic portfolios for assessment and accreditation is emerging, many who are now using, or who are beginning to use, electronic portfolios are looking to justify the cost and effort involved. The purposes of this volume are to create an in-depth portrait of ways in which electronic portfolios efforts can be evaluated effectively, and to provide xamples of e-folio evaluation in the form of case studies.

The intention of these chapters is to serve as models for assessment and evaluation of electronic portfolios in teacher education, as well as to spark further investigations on this tool that is ecoming ubiquitous in so many SCDE's across the United States and abroad.

CONTENTS: Introduction, *Natalie B. Milman and Pete Adamy*. Teacher's Self-Assessment of Reflection Skills as an Outcome of E-Folios, *Robert J. Beck and Sharon L. Bear*. Direct Evidence and the Continuous Evolution of Teacher Practice, *Arthur Recesso, Michael Hannafin, Feng Wang, Benjamin Deaton, Peter Rich and Craig Shepherd*. A Five-Step Model for Enhancing Electronic Teaching Portfolios, *Andrea Bartlett*. Too New a Tale to Tell?: Issues in Evaluating E-Portfolio Systems and Implementations, *Bruce Havelock*. Web-Based Digital Teaching Portfolios: What Happens After They Graduate? *Natalie B. Milman*. Focusing on Change in Individual Teachers' Practices Over Time: An Evaluation Model for Electronic Portfolios in Teacher Education, *Pete Adamy and Natalie B. Milman*.



Framing Research on Technology and Student Learning in the Content Areas
Implications for Educators

Lynn Bell, University of Virginia; Lynne Schrum, George Mason University; Ann D. Thompson

2008. Paperback 978-1-59311-706-1 $45.99. Hardcover 978-1-59311-707-8 $85.99. eBook 9781607528685 $65.

This book is a result of collaboration between NTLS and SITTE.

Framing Research is targeted at individuals or small teams of educational researchers who are interested in conducting high quality research addressing the effects of technology-enhanced instruction on student learning. The book summarizes and unpacks the methodologies of a variety of research studies, each situated in the context of school subject areas, such as science, mathematics, social studies, and English/language arts, as well as in the contexts of reading education, special education, and early childhood learning. Taken together, the analyses provide guidance on the design of future technology research grounded in student learning of K-12 curriculum. The conclusions also serve as a tool for teacher educators seeking to prepare teachers to integrate technology effectively in their instruction and to motivate reluctant teachers to overcome perceived inconveniences connected with technology use.

CONTENTS: Preface. Introduction, *Lynn Bell, Lynne Schrum, Ann Thompson, and Glen Bull*. Framing the Research on Technology and Student Learning in Mathematics, *Robert N. Ronau, Margaret L. Niess, Christine Browning, David Pugalee, Shannon O. Driskell and Rachel Harrington*. Framing the Research on Technology and Student Learning in Science Education, *John Park and David Slykuis*. Framing the Research on Technology and Student Learning in the Social Studies, *David Hicks, Adam Friedman, and John Lee*. Framing the Research on Technology and Student Learning in English Education During an Era of Changing Literacy Practices, *Carl A. Young, Troy Hicks, and Sara B. Kajder*. Framing the Research on Technology and Student Learning in Reading, *Michael C. McKenna and Carrie Simkin*. Framing the Research on Technology and Student Learning in Early Childhood Education, *Dina Rosen, X. Christine Wang, and Nicola Yelland*. Framing the Research on Accessible Technology for Students With Mild Disabilities, *Cindy L. Anderson and Kevin M. Anderson*. From Teacher Preparation to Student Learning: An Example From Secondary Mathematics, *Joe Garofalo, Nicole Juersivich, Jeffrey Steckroth, and Virginia Fraser*. Conclusion, Debra Sprague and Melissa Pierson.

Qualitative Research Methods in Education and Educational Technology

Jerry W. Willis, Manhattanville College

2008. Paperback 1-930608-54-3 978-1-930608-54-2 $45.99. Hardcover 1-930608-55-1 978-1-930608-55-9 $85.99. eBook 9781607529361 $65.

Qualitative Research Methods in Education and Educational Technology was written for students and scholars interested in exploring the many qualitative methods developed over the last 50 years in the social sciences. The book does not stop, however, at the boundaries of the social sciences. Social scientists now consume and use research methods from many fields. The rich resources of research methods and theories from both the humanities and philosophy are also covered in this book. It explains why postpositivist quantitative research should not be "the only game in town" and provides solid theoretical foundations, beginning with the positions of Plato and Aristotle, for broadening our horizons about what warrants our attention. Using Aristotle's concept of phronesis the author shows why methods such as narrative research and storytelling, hermeneutic inquiry, literary theory, philosophical inquiry, and much more have important applications in education and educational technology. On those foundations, the author also builds a framework for doing many types of research – from participatory action research to content analysis, to postmodern case studies, to empowerment research and philosophical inquiry. He accomplishes this through a combination of original text, summaries of exemplary research in education and educational technology, and suggested readings that are annotated and introduced at the end of each chapter. Many of these readings are available online and they extend the discussion of research methods or serve as exemplars of a particular type of educational technology research. There are open ended and conceptual questions for each reading, and developing your own answers to them is one way you can extend your depth of understanding about qualitative research methods in education and educational technology.

CONTENTS: SECTION 1: FOUNDATIONS. Wolves, Lambs, and Lions—Roaming the Research Range. What Is Research? Typologies of Research and Scholarship. More Greeks: Homer and the Sophists. **SECTION II: PATHWAYS TO UNDERSTANDING.** Purposes, Phronesis, and Bent Flyvbjerg. Building Your Relationships with Research. **SECTION III: PATHWAYS TO UNDERSTANDING: THE METHODS OF RESEARCH AND SCHOLARSHIP.** Making Sense of the Forms of Scholarship. Qualitative Research Methods. Methods of Scholarship from the Humanities. The Methods of Philosophical Inquiry. Design as Scholarship. **SECTION IV: DISSEMINATION OF RESULTS.** Forms of Communication and Conversation: Disseminating the Results of Scholarship.

Faculty Development by Design
Integrating Technology in Higher Education

Yong Zhao, Michigan State University; Matthew J. Koehler, Michigan State University; Punya Mishra, Michigan State University

2007. Paperback 978-1-59311-582-1 $45.99. Hardcover 978-1-59311-583-8 $85.99. eBook 9781607525820 $65.

This book attempts to offer not just a bird's-eye view of the communities of designers project, but also to help identify broad themes and issues that can inform discussions and policies of technology integration at other institutions.

CONTENTS: Acknowledgments. Editor’s Preface. Communities of Designers: A Brief History and Introduction, *Punya Mishra, Matthew J. Koehler, and Yong Zhao.* Infusing Technology in Teacher Education: How Does Learning Guide Design? *Cheryl L. Rosaen and Sharon Hobson.* Odyssey in Technology: A Quest to Design Interactive Contexts for Exploring Children’s Responses to Literature, *Laura Apol and Sheryl Rop.* Sexy Beast: The Integration of Video Technology in an English Methods Course, *Leslie David Burns and Stephen Koziol.* The Technology and Literacy Project: Crossing Boundaries to Conceptualize the New Literacies, *Dorothea Anagnostopoulos, Jory Brass, and Dipendra Subedi.* Maps and More: Engaging Maps and Social Science Data as Narratives About the World, *Avner Segall and Bettie Landauer-Menchik.* Collaborative Development of Technology-Based Social Studies Materials, *Timothy H. Little.* Design as Professional Development: The Inner and Outer Journeys of Learning to Develop Online Learning, *John M. Dirkx.* A Faculty Member’s Journey in Using Technology to Enhance Learning, *Ann E. Austin.* Integrating Technology Through Community-Based Design, *Martin Oliver.* Communities of Designers: Transforming a Situation Into a Unified Whole, *Bertram “Chip” Bruce.* About the Authors.

Faculty Mentoring
The Power of Students in Developing Technology Expertise

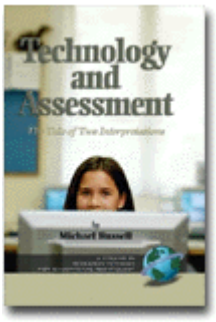
Ismail Sahin; Hsueh-Hua Chuang; Ann D. Thompson

2007. Paperback 978-1-59311-570-8 $45.99. Hardcover 978-1-59311-571-5 $85.99. eBook 9781607527978 $65.

The purpose of this book is to describe the approach and process involved in a program designed to assist faculty in acquiring technology skills and to apply these skills in constructing meaningful learning-centered applications. Most educators will agree that the challenge of developing faculty technology expertise is a major and crucial one for colleges and universities. As early as 1988 it became apparent that teachers were not prepared to use new technologies coming into their classrooms (OTA, 1988).

This book is intended for educators who are working to lead the meaningful integration of technology into higher education and K–12 environments. The detailed stories provide useful knowledge and background for K–12 educators, higher education educators, and trainers in business and industry who are faced with the challenge of helping people learn to use technology effectively.

CONTENTS: Series Editor's Preface. Preface, *Ann Thompson.* History of the Faculty Technology Mentoring Program, *Ann Thompson.* Role of the Faculty Mentoring Program in the Adoption and Diffusion of Instructional Technology: The Theoretical Perspective, *Ismail Sahin.* Faculty Technology Mentoring Programs: Major Trends in the Literature, *Hsueh-Hua Chuang and Denise Schmidt.* A Senior Faculty Member Approaches Technology, *Denise Lindstrom and Geoff Abelson.* Making Connections: An International Student's Perspective, *Hsueh-Hua Chuang.* Designing an On-line Learning Environment: Experts Learning Together, *Qian Li.* Understanding and Addressing a Faculty Member's Concerns in the Technology Integration Process, *Sonmez Pamuk.* Technology Mentoring through the Eyes of K–5 Practitioners, *Comfort Kouadio.* Mentor Me This! Technology Mentoring in a Secondary School, *Jeannette Babcock and Mary Ohaver Moermond.* Learing to Mentor: A Student's Perspective, *Natalie Johnson.* Lessons Learned, *Ann Thompson.* Epilogue.



Technology and Assessment
The Tale of Two Interpretations

Michael Russell, Boston College

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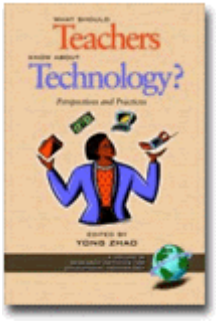
Together, the words technology and assess-ment have different meaning for different people. Those who work with educational or instructional technology take these words to mean assessing the impacts of technology on teaching and learning. Test developers and psychometricians, however, consider ways in which computer-based technologies can be used to enhance current approaches to student assessment. This book examines technology and assessment from both perspectives by examining past, current and promising methodol-ogies and applications in both fields. The influences instructional uses of technology and the increasing reliance on testing to gauge student and school performance have on one another are also explored. The book concludes by describing an organizational structure that could bring instructional applications of technology and assessment practices into closer alignment.

CONTENTS: Preface. **Chapter 1:** Technology and Assessment: Different Meaning for Different People. **Chapter 2:** Assessing Technology: An Overview of the Past Two Decades. **Chapter 3:** Assessing Technology: Challenges to Assessing Technology. **Chapter 4:** Assessing Technology: Promising Practices. **Chapter 5:** Technology and Student Assessment: An Overview of the Past Four Decades. **Chapter 6:** Technology and Student Assessment: Challenges to Assessment and Accountability. **Chapter 7:** Technology and Student Assessment: The Promise of Tomorrow's Assessments. **Chapter 8:** Intersections: Influence of Assessment on Instructional Uses of Technology. **Chapter 9:** Intersections: Influences of Instructional Uses of Technology and Student Assessment. **Chapter 10:** Intersections: Bringing Educational Technology and Educational Assessment into Closer Alignment.



What Should Teachers Know about Technology
Perspectives and Practices

Yong Zhao, Michigan State University

2003. Paperback 1-59311-036-7 978-1-59311-036-9 $45.99. Hardcover 1-59311-037-5 978-1-59311-037-6 $85.99. eBook 9781607527640 $65.

Schools and colleges of teacher education are called upon to prepare teachers to use technology. The ability to use technology has been established as a requirement for teacher licensing, certification, and sometimes employment. This book offers a comprehensive picture of the prominent perspectives on technology literacy for teachers and current practices in preparing teachers to become technologically literate. Articles included in this volume address such pressing issues as the theoretical foundations of teacher technology knowledge, the role of technology in teaching, technology standards for teachers, and effective approaches to prepare technologically competent teachers.

Methods of Evaluating Educational Technology

Laura Blasi, University of Virginia; Walt Heinecke, University of Virginia

2001. Paperback 1-930608-56-X 978-1-930608-56-6 $45.99. Hardcover 1-930608-57-8 978-1-930608-57-3 $85.99. eBook 9781607525042 $65.

This volume gathers some of the methods being developed by evaluators from university settings and the private sector. While providing models and methods, these authors also raise larger questions, such as: "How can schools meet the challenge of educating all children without being limited by the educational legacy of a 'one size fits all' curriculum and normative testing?" More than documenting an "apprenticeship to gadgetry," evaluators are seeking to measure meaningful learning and changes in teaching - investigating approaches that are not possible or that are less accessible when students are in traditional classrooms without technology.

In this first volume of the series Research Methods for Educational Technology (RMET) the contributing authors draw upon examples of their work evaluating the implementation and development of educational technology as well as the impact of policies and programs in this field. Within this volume several authors have written about the implementation and evaluation of technology across cultures and national boundaries, pointing to an area of research that will rapidly expand in this decade. The concern for meeting the needs of policymakers is also apparent in several of these chapters, but there is tension between providing them with positive results to support their efforts and reexamining the questions they are asking and how these questions are developed. We know that evaluation is not the extended arm of public relations, and yet it becomes clear that evaluators are often asked to demonstrate a project "is successful" on the threat that the funding will be cut. While this decision-making process fits the timetable of the fiscal year, it does not acknowledge that evaluation can be formative and strengthen programs. This timetable also ignores the investment of time that is needed when implementing innovations like the Internet into teaching and learning.

Many of the authors included in this volume write from the context of evaluating federally-funded programs, and they provide valuable insight for future projects which are created and evaluated at the state-level. As technology initiatives are developed and funded outside of the federal arena, more evaluators will be called upon. From approaches developed from federally-funded projects, we can build upon these methods and models for evaluation within regional projects to answer questions related to budgets and accountability. As we answer these immediate questions, we can move forward to examine the long-term impact of technology, and the possibility that exercises in conformity will replace the adventure of human enlightenment for our children.

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