Robert N. Ronau (University of Louisville, USA), Christopher R. Rakes (University of Louisville, USA) and Margaret L. Niess (Oregon State University, USA)

Recent technological innovation has altered the way educators approach teaching and learning. These new technologies provide countless advantages in the classroom; however, we are not yet clear on how they should be implemented. The pedagogical value of specific technology tools and the cumulative effects of technology exposure over time on student learning are two areas that need to be explored in order to better determine the effectiveness of technology as a teaching tool.

Educational Technology, Teacher Knowledge, and Classroom Impact: A Research Handbook on Frameworks and Approaches provides a framework for evaluating and conducting educational technology research, sharing research on educational technology in education content areas, and proposing structures to guide, link, and build new structures with future research. This book provides essential support for compiling the resulting literature and envisioning future research directions in this area.

Topics Covered:
- Career and Technical Education (CTE)
- Educational Technology
- Future role of Educational Technology
- Integration of Disciplines
- Internal and External Classroom Constraints
- Pedagogical Strategies
- Research Design Frameworks
- Teacher Knowledge Frameworks
- Teacher Qualifications
- Technology, Pedagogy, and Content Knowledge (TPACK)

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How Do We Measure TPACK? Let Me Count the Ways
Koehler Matthew J. (Michigan State University, USA)
Shin Tae Seob (University of Central Missouri, USA)
Mishra Punya (Michigan State University, USA)

Chapter 3
Assessment in Authentic Environments:
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Alexander R. Curby (University of North Texas, USA)
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Section 2: The Current Landscape in Educational Technology and Teacher Knowledge Research

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