Foreword

A smile, a glint of understanding in the eyes, a meaningful conversation, enthusiastic questions – educators live for those moments when students engage and participate actively in their own learning. With the new, enticing technological tools available to our students now, in their personal as well as academic lives, the path to engagement and substantive learning would seem to be easy. Surely all that teachers have to do now is provide the tools, stand back, and watch the learning happen.

Any educator knows, of course, that technology is merely a tool, not a panacea, but a tool that both signals and provokes a substantive change in the educational environment. Technology has been one of the drivers of educational reform in which the paradigm has shifted from teacher-centered, didactic instruction to student-centered, constructivist classrooms. The authors of this book, *Technological Tools for the Literacy Classroom*, use the lens of technology to probe this significant change in the ecosystem of literacy teaching and learning, moving to a culture of participation, collaboration, student engagement, and distributed knowledge.

The primary reason that education must change is the students themselves. Students today have grown up with technology, at least in their personal lives. Some researchers even claim that students’ brains are different as a result of the high-speed, linked, multi-format world of the Internet. Students expect to multi-task, connect to friends and information online, interact with others continuously, and use technology tools to share their thoughts and feelings publicly. Students are used to crowd sourcing and to collaborating and sharing knowledge with others – at least during their out-of-school time. Unfortunately, many of these communication avenues are not available to them in school. Teachers and the educational system, for myriad reasons, have been slow to take advantage of the strengths of new technologies, even to the extent of banning their use in school.

The change in students has increased pressure on teachers to transform their instructional methods. The ideas of John Dewey and of “learning by doing” have seen a new resurgence in the educational reform model involving constructivism, active engagement, and authentic learning experiences. Teachers may know the power of centering the instructional process on provoking and supporting students to construct their own understandings, but “knowing” and being able to “do” may be two quite different scenarios. A teacher used to lecturing and delivering content may find it quite difficult to give up the authority vested in imparting knowledge. The art of designing effective and authentic learning experiences in which students are expected to inquire and pursue their own understandings is complex and difficult, especially when the new design is in conflict with a teacher’s previous mental model of a teacher-controlled classroom.
A third change in the educational landscape, in addition to the differences in students and the changes needed in instructional methods, is the new scope of literacy competencies and dispositions required of all students to thrive in this technological world. The explosion of information has made acquiring a specific body of knowledge not as important as developing the skills of critical thinking, creativity, decision-making, collaboration, leadership, information literacy, and the “new literacies” of visual literacy, media literacy, technological literacy, and digital literacy added to the foundations of reading, writing, speaking, and listening. Even the concept of essential dispositions must be rethought because educators have begun to realize that students can only succeed in student-centered learning when they demonstrate autonomy, decisiveness, flexibility, perseverance, and creativity.

Naming the needed skills and dispositions is only the fledgling first step in the need to develop deep understanding of the thinking processes and attitudes involved in learning today. Teachers and researchers are discovering what new literacy skills are necessary for making meaning and communicating in the digital environment, such as the ability to connect ideas and evidence across multiple sources, to contextualize the dollops of information found on many (most?) websites, to assess the authority and accuracy of information found on the Web, to identify point of view and determine its effect on the information presented, and to find patterns and draw conclusions from information that is overwhelmingly plentiful and disorganized. Dispositions pose challenges, too. Even though a disposition like perseverance has always been important for successful learning, educators are struggling to foster that attitude in the pervading atmosphere of quick access and response, multitasking, and screen-shot reading.

Most teachers recognize that, by integrating technology into their instruction, they will be able to empower individual students to develop the needed skills and attitudes. Increasingly, research and practice are providing examples of successful technology integration where the instructional design drives the use of technology, not the other way around. Educators are particularly heartened to see the opportunities provided by technology to offer authentic learning experiences and to address the individual needs of struggling readers, students with disabilities, and students who are English Language Learners. Teachers have become believers, if not expert implementers.

Building teacher expertise in integrating technology to foster deep literacy learning is the focus of this book. It is hard work for teachers to change their instructional paradigm, to learn new technologies effectively enough to use them appropriately and well, and to design instruction that fulfills the vision of student-centered, constructivist education. Support for teachers must be provided in two arenas – teacher education programs for those just entering the field and professional development opportunities for those in practice who want to change their instructional methodology. This book provides a blend of research and practice with invaluable strategies, examples, resources, and technology tools that will guide both beginning and experienced teachers to effective use of technology for teaching and learning. And on the way, educators will develop a new paradigm that brings education reform to life in K-12 literacy classrooms and school libraries.

Technological Tools for the Literacy Classroom is organized into five sections: historical overview; Web-based/online tools; hardware and software applications; teacher training; and a look into the future. Each chapter provides well-documented background information that pulls together the latest and most pertinent research along with current research and best practice examples. Within the Web-based tools section, specific chapters focus on using the tools to teach writing, provide interactive experiences, provide multimodal resources, and balance Literacy 1.0 with Literacy 2.0. The hardware and software section
provides a number of specific examples that teachers will find very easy to adopt or adapt to their own situations, including attention to students with disabilities, talking texts, iPad applications, enhanced picture books, digital e-book readers, apps, and a technology toolbox. The teacher training section focuses on teacher candidate perceptions of technology, case study models of the implementation of technology, technology for the literacy development of English Language Learners, and an example of the infusion of technology into the teaching of multiculturalism for pre-service teachers. The chapters provide extensive bibliographies, so the learning they evoke will continue as far as teachers want to sustain it.

The focus of this book is solidly on preparing students to emerge from school as successful participants in the ever-changing 21st Century world of technology and information. The path to that preparation is education reform and rethinking the role of educators, so that technology becomes a tool to drive active and self-directed learning, collaboration, social interaction, creative problem-solving, and independent literacy development. By empowering teachers to provoke, support, challenge, and guide their students’ literacy learning through the use of technology, the authors fulfill the implicit promise of this book to transform the educational experience for all students.

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