

Chapter 1

ENCOURAGING LITERACY, EMBRACING TECHNOLOGY



Serious Comix is a student-centered literacy-building program in which students use technology to create and present their own digital comic books (digital storyboards). Students enhance their reading/writing and visual literacy skills and learn transferable technology skills while working in an environment created to support dialogue and collaboration.

To create a Serious Comix digital storyboard, students engage in a combination of reading, writing, and image creation within a comic-strip–style format. Students find the comic book format easy to understand and use. Because comic books are laid out in sequential frames, it is easy for readers to track the progress of a story. The format also allows student authors to easily jump ahead and go back as necessary during the creative process. Because each frame contains both text and a picture, readers can easily grasp and contextualize a story, and writers are not overwhelmed by the amount of text they need to produce. Moreover, the clearly defined framing and sequencing of a comic helps students better understand the critical literary points of a story.

Serious Comix is a fun and engaging project. Students are excited at the thought of creating their own comic books. But students aren't simply assigned to draw a cartoon. Serious Comix invites students to organize their thoughts. Through guided practice, students are shown how to give structure to their ideas and how to commit those ideas to writing and illustrations via the use of graphic organizers.

The comic book creation process has three essential components: the dialogue exchange, the writing process, and the use of technology to construct and present the comic book. These components are combined into teaching and learning activities such as

discussing and developing story ideas, learning and using graphic organizers, working independently and as part of a team, evaluating the work of peers, using technology as a tool to complete work, and presenting the finished product. Class time is designed to allow students to share stories and ideas, improve literacy and technology skills, and interact with each other.

What Is Serious Comix?

As I developed the Serious Comix project, I encountered some fundamental instructional, technological, and environmental concerns. Answering the following questions helped me fuse my knowledge of technology, curriculum mandates, and student dispositions into the whole that is Serious Comix.

Digital Storyboards and Literacy. What sort of comic will students create? How will this activity meet the literacy development needs of diverse learners? How does the creation of this comic address the integration of literacy and technology?

Technology as Instructional Tool. What is meant by “technology as an instructional tool”? How should technology be used as an instructional tool?

Teaching and Learning Environment. How can the teaching environment foster reflective practices and ongoing assessments that are specific to both technology integration and literacy? What are the key characteristics that inform instructional planning in a nontraditional or alternative environment?

Technology Standards and Teacher Knowledge. What are the technology standards for teaching literacy and technology? How will the technological knowledge and skills of a classroom teacher affect technology integration within the larger literacy curriculum?

Comics and Literacy

Benjamin Franklin’s newspaper, the *Pennsylvania Gazette*, published one of the earliest comics that included situation, text, and cartoon characters. On May 9, 1754, the famous “Join, or Die” cartoon appeared (see Figure 1.1). It was a call for the original colonies to unite in the common cause of rebellion against English rule, and it is considered to be the first American political cartoon. That we remember it today is testament to the enduring power of Franklin’s creative imagination, technical skill, and political vision. It is also a testament to the power of blending images with text—readers in Franklin’s time readily understood the message and intent of this cartoon, just as readily as we do today.

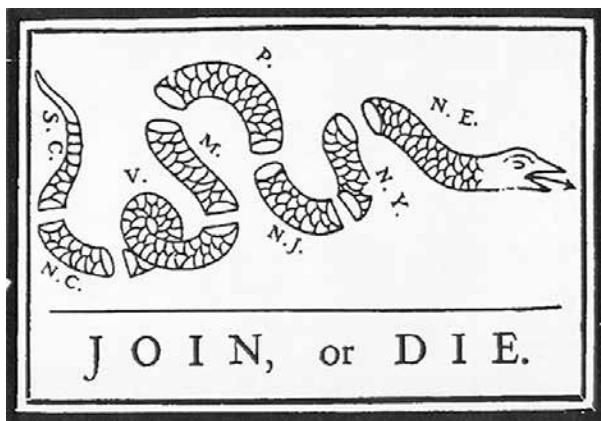


Figure 1.1 Comics blend image with text to create meaning

This connection between words and illustrations—whether encountered in cartoons, comic strips, comic books, or graphic novels—can transform the way we read. First thought of as just an amusement or distraction, comics have found a legitimate place in the classroom. There are two main advantages of using digital storyboards for improving literacy. The first is that research has shown that the use of comic books as instructional texts has a positive impact on improving students’ literacy skills (Starr, 2004). Creating and

interpreting images also enables students to access higher-order creative and critical thinking skills (Bloom, 1984). The second is that using images to facilitate reading and writing is a form of differentiated instruction that expands student access to the classroom English language arts curriculum. Viewing a storyboard, students are able to analyze images in order to sequence, decode, comprehend, and infer the storyline (Piro, 2002). In this way, comics can provide entry points, learning tasks, and outcomes that can meet diverse student literacy needs.

Although Serious Comix students may not create digital storyboards with a relevance that will span generations, their creations nonetheless will, in some way, share a common visual language, organizational sensibility, and presentation style with Franklin's classic work. More importantly, a student's digital storyboard will demonstrate individual interests and purpose and will provide tangible evidence of individual growth in terms of literacy and effective technology use.

Promoting Multiple Literacies

Literacy is more than the ability to read and write. The United Nations Educational, Scientific and Cultural Organization (UNESCO) defines *literacy* as the "ability to identify, understand, interpret, create, communicate, compute, and use printed and written materials associated with varying contexts. The development of literacy involves a continuum of learning in enabling individuals to achieve their goals, to develop their knowledge and potential, and to participate fully in their community and wider society." The word *literacy* has been attached to math, science, social studies, media, and now technology.

Schools everywhere are tasked with increasing traditional literacy levels. For example, as of 2003, New York City's public schools were mandated to teach a "Balanced Literacy" curriculum. According to the curriculum, students must be immersed and exposed to a

literature-rich environment for all subjects (e.g., classroom libraries, wall words, posters, bulletin boards, and other like items). The New York City Department of Education website (<http://schools.nyc.gov>) discusses how Balanced Literacy is implemented in each class as it “stresses the essential dimensions of reading through explicit teaching of phonics, phonemic awareness, fluency and expressiveness, vocabulary, and comprehension. Daily read-aloud, independent reading time, reading workshop, writing workshop, and systematic word study instruction are key features of the approach.”

The Serious Comix project promotes traditional literacy, visual literacy, and technology literacy. Students learn to improve their reading and writing skills by connecting created images and text. The students’ ability to create a storyline—reading and writing, analyzing and comprehending words—is a strong and relevant foundation from which to teach literacy strategies. Technology literacy is accomplished through the use of instructional tools such as word processors and presentation applications.

Visual Literacy

According to Arizpe (2001), creating and interpreting images enables students to develop their visual literacy skills. Visual literacy skills allow students to analyze their images, express their thoughts verbally, and then associate text in the form of a storyline. In Serious Comix, graphic organizers are used as an instructional tool to bridge traditional and visual literacy.

Graphic organizers (visual learning aids that can represent knowledge, concepts, or ideas in an organized manner) are used to facilitate the introduction of visual storytelling issues that may be new to students while allowing teachers to review the primary elements of a story (main idea, beginning, middle, and conclusion) that students may already have encountered elsewhere. Teachers can use graphic organizers to integrate visual storytelling language basics into their lessons.

Technology as Instructional Tool

One of the primary goals of the Serious Comix project is the development of beginning technology literacy. The use of technology as a literacy instructional tool often appears to motivate struggling students to spend more time practicing important academic skills (Daiute, 1983). Digital technology is a particularly effective tool for helping students to create comics. This technology offers a predictable, forgiving workspace and provides the students an open yet controlled environment in which to explore their ideas.

My technology-literacy schedule for instructional planning and delivery is focused on the student's individual needs. This is to say, in some ways each Serious Comix project is custom built for its particular students. I believe the goals of integrating technology as a tool for literacy must be aligned with the following:

- Acknowledging that a student does not come to school as a blank slate, but has a culturally specific set of tools that should be used to facilitate learning.
- Knowing how each student learns and taking into consideration the specific strengths and weaknesses of each student.
- Recognizing that we (teacher–student or student–student) will learn from each other, both individually and collectively, about technology, literacy skills, and learning strategies.

The Learning Environment

Social interaction is a critical component of learning and one major aspect of social interaction is talking, or dialogues. I designed the learning environment of the Serious Comix class to encourage dialogue—both between student and teacher and between student and student—enabling students to discuss what and how they are

learning. According to Mink (1988), students can make a personal connection to their academics and will be more inclined to retain information when provided an opportunity to discuss it.

This instructional method is based on Tobin and Roth's (2006) work on cogenerative dialogue. This method provides a way for students and teachers to distinguish a formal classroom setting from an "alternative" setting, thereby creating a space where all participants can imagine, share, and envision together what is possible outside the traditional classroom. This format allows the free production of newly acquired cultures (e.g., talking without raising hands, exploring the environment), which help students explore and practice literacy skills and technology. I will discuss cogenerative dialogue in more detail in Chapter 2.

In my own experience with Serious Comix, I found that the dialogue format put students at ease because it eliminated the fear of being put on the spot to "correctly" answer a question. The use of open dialogue enabled the students to relax and learn technology and literacy at their own pace. The cogenerative dialogue learning environment helped participants explore their ideas, opinions, and feelings and assist one another through sharing and questioning in a measured, step-by-step learning process. This environment also expanded the power to act for all participants, resulting in more opportunities for peer teaching .

Technology Standards and Teacher Knowledge

The process of creating storyboards for the Serious Comix project requires students to use technology applications and puts demands on their existing literacy skills. But because the focus of Serious Comix is literacy development, once the students learn the technology involved, the technology itself needs to fade into the background. And it is the quality of the instructor-created learning

environment that ultimately determines the extent of this technology integration.

Good instruction is critical in helping students to make effective use of technologies. This is true of any tool, from pencil and paper to computers and interactive whiteboards. It is the extent to which instructional strategies effectively incorporate technology that affects student success in terms of meaningful storyboard creation. I recommend basing instructional design on national and regional standards.

ISTE's NETS

The 21st century was ushered in by significant changes to educational policy in regard to technology instruction. First, there was the signing of the No Child Left Behind Act of 2001 (NCLB), which became the guiding educational legislation of the land, causing a 2004 revision of the Individuals with Disabilities Education Act (IDEA). This revision aligned the NCLB and IDEA by highlighting technology as a tool that is capable of enhancing academics and closing achievement gaps. NCLB further asserted that “highly qualified” teachers are individuals who are capable of integrating technology as an academic tool into the curriculum to improve student achievement (NCLB, 2001).

Based on NCLB and IDEA, teachers are mandated to prepare the student population academically, with the use of technology as an instructional tool for the changing educational, technological, and economic world.

This mandate for technology integration is supported by policy-makers at all levels and is promoted by organizations such as the National Council for Accreditation of Teacher Education (NCATE) and the International Society for Technology in Education (ISTE). ISTE, in partnership with others, developed educational technology standards for four different groups of users:

- NETS•S for students
- NETS•T for teachers
- NETS•A for administrators
- NETS•C for technology coaches

Instructional design for *Serious Comix* is based on ISTE’s educational technology standards NETS•S and NETS•T. These standards identify “highly qualified” teachers as those who, among other things, learn and apply strategies using technology to support learners with diverse needs and backgrounds.

ISTE’s NETS for Students (NETS•S)

The NETS•S states that all K–12 students should be prepared to meet the following standards and performance indicators.

1. **Creativity and Innovation**

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.

2. **Communication and Collaboration**

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

3. **Research and Information Fluency**

Students apply digital tools to gather, evaluate, and use information.

4. **Critical Thinking, Problem Solving, and Decision Making**

Students use critical-thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

5. Digital Citizenship

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

6. Technology Operations and Concepts

Students demonstrate a sound understanding of technology concepts, systems, and operations.

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ISTE's NETS for Teachers (NETS•T)

The NETS•T states that all classroom teachers should be prepared to meet the following standards and performance indicators.

1. Facilitate and Inspire Student Learning and Creativity

Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments.

2. Design and Develop Digital-Age Learning Experiences and Assessments

Teachers design, develop, and evaluate authentic learning experiences and assessments incorporating contemporary tools and resources to maximize content learning in context and to develop the knowledge, skills, and attitudes identified in the NETS•S.

3. Model Digital-Age Work and Learning

Teachers exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society.

4. Promote and Model Digital Citizenship and Responsibility

Teachers understand local and global societal issues and responsibilities in an evolving digital culture and exhibit legal and ethical behavior in their professional practices.

5. Engage in Professional Growth and Leadership

Teachers continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources.

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Common Core State Standards Initiative

In 2009, the newest introduction to the U.S. educational arena was the Common Core State Standards (CCSS) Initiative, which aimed at preparing all students, to the best of their abilities, for college and/or careers (www.corestandards.org). The new standards were a joint effort among several agencies across the country to develop a set of rigorous and internationally competitive standards in English language and mathematics that included higher-order thinking and analytical skills for K–12, with a focus on successful postsecondary outcome. Competitive federal “Race to the Top” grants were provided as incentives to states that adopted the standards or similar internationally benchmarked standards and assessments that prepare students for success in college and the workplace.

In a press release dated July 2009, President Obama and U.S. Secretary of Education Arne Duncan announced a \$4.35 billion Race to the Top grant program with a total pledge of \$10 billion (www2.ed.gov/programs/racetothetop). The grants are designed to facilitate competition to spur innovation and reform in state and local-district K–12 education. States are awarded points for satisfying certain educational policies, such as improving teacher and principal effectiveness based on performance, demonstrating significant progress in raising achievement and closing gaps, and turning around the lowest achieving schools. In addition to the 485 possible points listed in the criteria, schools can earn an additional 15 points if they meet the STEM (science, technology, engineering, and math) criteria.

On July 19, 2010, New York State officially adopted the Common Core State Standards with full implementation expected by 2015. Based on the CCSS, the goal of English language arts is to ensure that students are sufficiently prepared by the end of high school. This includes the key areas of reading, writing, language, speaking and listening, and technology viewed as a way to learn knowledge and skills in all subject areas. And, of course, with the implementation of new academic standards come new assessment benchmarks to measure student achievement. Formal assessment is expected to begin in the school year 2014–2015, which coincides with the projected implementation year for most states.

Concluding Thoughts

It is imperative for educators to have an arsenal of instructional alternatives to address different learning challenges, and to know how to administer them effectively. In this book, I intend to show you how the engagement created by the trifecta of comic book creation, access to technology tools, and a cogenerative dialogue classroom format leads to literacy gains for even the most challenged learners. Even better, the Serious Comix project instills a new level of agency in learners—a personal ownership of learning that more traditional lessons are not able to tap. Read on to learn more!