Beyond Words

The Craftsmanship of Digital Products

By Bernajean Porter

Imagineing ideas, making meaning of zillions of data factoids, or discovering new concepts are not very meaningful or useful without the ability to communicate these thoughts effectively to others. Digital media is a great multidimensional communication tool because it combines images, text, sound, and animation. However, today’s classrooms still work primarily with the written or spoken word for learning and communicating.

Although written words have long been considered a primary skill, they were not always welcome or valued. Socrates authored nothing himself because he felt that knowledge was a living, interactive thing. He was opposed to written words and gave stern warnings that words would diminish the intellectual development of man. In fact, most of our knowledge of Socrates’ ideas comes from Plato's writings. It is Plato’s written account of his teacher’s life that outlines one of Socrates’ most famous philosophical ideas: the necessity of doing what one thinks is right even in the face of universal opposition. Today the art of using Socratic dialogue (inquiry) still influences great thinkers and learners thanks to Plato’s effective communication with the new technology of his day—written words.

We now have more varied choices of communication technology than Socrates ever imagined—television, Web sites, movies, video blogging, and photo essays. Printed text has lost its monopoly to multimedia. For students to be effective communicators in the 21st century, they need to be sophisticated in expressing ideas with multiple communication technologies, not just the written word.

Digital storytelling allows students to use multimedia tools in a sophisticated fashion while capturing the joy of creating and sharing their stories. In my book DigiTales: The Art of Telling Digital Stories, along with workshops training educators to create and assess digital products, I have found that production processes and guidelines need to be explicit to increase the quality of student products. Effective communication starts with an author having content that is worth sharing. Novelties such as flying words or spinning images sprinkled with a multitude of transitions, special effects, boinks, and bonks divert the attention of the viewer from the original message. Encourage students to intentionally develop content as a genre of communication focused on making their message come alive for others rather than displaying their technical wizardry by “doing” slide shows, Web sites, or movies. Asking students to determine and develop a type of communication will help them to organize their information structure first and begin to select the technical elements as craftsmanship that unfolds their message. (See Types of Communication, p. 30, for tools to help students choose the right genre.)

As an author determines how to package his or her thoughts, knowing the purpose and audience begins to shape the content, approach, and medium that will be chosen. Each medium offers unique design choices for using images, sounds, animations, video, music, transitions, and special...
effects. The goal is to artfully mix the technical elements of the medium in ways that communicate the message. From dramatic openings to memorable conclusions, the author should strive to keep viewers hooked throughout the production.

Teachers need to be diligent about requiring scripts and storyboards as a readiness ticket before using any technology. Scripts and storyboards ensure that the content is accurate and robust and demonstrate that media choices are effective and designed to support the message.

Welcome to Show Business

Marshall McLuhan declared that the medium is the message. Each medium used influences in its own way how we represent our information. The media element selected—image, sound, transition, voice, or special effect—shapes and forms ideas into a communication piece that reaches out to inform, influence, and touch others. Technical knowledge doesn’t ensure that information will be designed in creative, effective ways. Design elements for communication guide crafting the message to increase the power of influence and understanding. Craftsmanship guidelines—the artful use of the media for communication—need to be considered regardless of whether you are making films, digital stories, Web sites, presentations, or other digital products.

Images

People process visual information 60,000 times more quickly than narrative information, making visual literacy a key 21st-century skill for today’s students to master.

Images, graphics, or videos should illuminate content in the message through showing, not telling, information. Rather than narrating the images that have been gathered like a photo essay, exemplary use strives to use images in such a way that without them there is less understanding, influence, or impact. For example, the story Hiroshima is an example of images sequenced as a separate visual story telling more than the author’s words. Although the student poses the central question, “Is war necessary?”, it is the images,
not the voice, that answer the question. Without using words, the author clearly makes his point of view apparent. And, in Cuban Missile Crisis, a little girl shares her thoughts and experiences of having a daddy who was not home, while her images give visual historical context beyond her words.

Just as there is grammar for words, there is also a grammar for images.

- Leaving all images displayed for the same duration is a very boring design strategy. The pacing of images along with their literal information creates a mood. Vary the duration or move them to the beat of the music in ways that flow harmoniously with the message.
- Unless the author is intentionally trying to create a specific mood, images should generally be displayed 3–4 seconds, long enough for viewers to engage with them but not so long that they become bored.
- The use of pan and zoom (à la Ken Burns) also gives interest to a still, allowing longer durations, and introduces intimacy with a topic.
- Each font chosen also creates visual moods and setting. Text size should be appropriate for the medium. If the medium is moving, text should be left at least long enough for viewers to read it twice!
- Filming uses a special grammar for communication that students will also need to study. The Grammar of TV and Film Web site is a good resource for students.

**Sound**

George Lucas contends that sound is 50% of the motion picture experience. It establishes tone, mood, and emotional context in ways that deepen the effects of the message. Four general types of sound can be used to illuminate the message meaning: narration, guest voices, ambient sounds (e.g., gun shots, roosters crowing, or clocks ticking), and music. The right combination of sounds will quickly and nonverbally draw a viewer into the author’s world.

Voices should strive to be performed, not read or recited. Guest voices add variety and authenticity. The story Trip to the Moon includes not only the enchanting student voice but also the guest voice of Elvis. Westward Ho uses student guest voices to show how technology made a difference in one classroom. A well-performed voice creates intimacy with the information while making the meaning of the message come alive for viewers.

Music should be more than background sound. Tempo, style, and rhythm guide the duration of images as well as timing of transitions. Be careful not to have lyrics competing with narrations. Also check that

### Types of Communication

**Narrative**

- **Personal Expression:** Subjective or introspective message sharing experiences, feelings, or points of view

- **Myth/Folk Tale:** Story made up to explain origins, values, or beliefs. Often a cultural story developed and modified by groups of people over time

- **Short Story:** Fictional story incorporating plot, setting, characters, dénouement while using a universal theme

- **Docudrama:** Nonfiction story with plot, setting, characters, and dénouement, but highly fact-based, using an abundance of primary source materials

**Informative/Expository**

- **Summary Report:** Summarizing and presenting existing information

- **Book Report:** Summarizing and evaluating a book

- **How-To Directions:** Step-by-step information demonstrating understanding and organized for an audience to be able to re-create

- **Biography:** Summarizing information about the lives of people and their legacies

**Persuasive**

- **Documentary:** Generally narrated, fair, and balanced piece. Multiple points of view are presented based on an abundant number of primary media sources to create audience understanding about complex topics

- **Advertisement/Public Service Announcement:** Short spots designed to sell ideas, products, or actions to affect either commercial or noncommercial decisions

- **Describe/Conclude:** A very thorough, detailed description of a single topic culminating in an evidence-based conclusion that is well argued

- **Analyze/Conclude:** Not only is the problem or topic described, but multiple choices or factors are analyzed for new meaning and thinking about the effects, leading to a recommended conclusion

- **Analyze/Persuade:** Similar to analyze/conclude, with the structure of the information designed to sway an audience to share the author’s position along with an emotional or intellectual appeal for a “call to action”

- **Compare/Contrast:** Logical comparison of two or more products, ideas, or actions presenting the pros and cons of each before proposing a compelling reason for adopting one of them

- **Cause/Effect:** Shows a logical, compelling relationship between a situation and the effects it has produced to influence the audience to adopt the same position as the author

**Participatory**

- **Participatory Environment:** An information product that includes elements for users to make ongoing contributions to add value or evolve the content or concepts beyond the author’s own work

Find scoring guides for all 16 types of communication under Evaluation on the DigiTales Web site.
sound levels of music do not compete with being able to hear narrations. If it sounds balanced in the computer, lower it another two or more levels, as sounds tend to get “hotter” when exported. *Music in My Head* shows how music illuminates meaning and partners with pacing the story.

Sometimes design choices might use only the music, and other times the music would be receded to allow the voices or ambient sounds to be the focus. The author of the story *Sixty Seconds* decided that music would detract from her key sound element, a ticking clock. Her use of ambient sounds is intentional and effective in delivering the tone and mood of her message.

Products need at least two soundtracks, as it is really difficult to illuminate messages with only one track. A single track limits the mixing of types of sounds and doesn’t have the ability to vary the volume levels. Go the extra mile to record great voices by using external microphones and spit guards and finding a quiet space to record in. Coach students to pace their voices so written words are delivered with clarity and emotional meaning.

**Design**

Using technology is more than being able to master technical skills. From beginning to end, choices of images, music, sound, video, fonts, and title styles should be intentional. As each choice is made, be curious about whether students are decorating, illustrating, or illuminating the message?Decorating may be fun and demonstrate technical skills, but beware of students who, diverted by the novelty, are inserting as many font styles, transitions, and special effects as the program offers. Bells and whistles distract and dilute the strength of their messages. Illustrating is the literal use of images, sounds, and special effects, generally giving the same message even if they were not there. Talk about

A great design gives sticking power and accelerate joyful learning. Using technology to rediscover events sharing strategies for national and international speaker and facilitator at Bernajean Porter is a featured

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**Resources**

Amy’s Story: http://www.netsmartz.org/resources/reallife.htm#realamy

DigiTales: http://www.digitales.us

(Click the StoryKeeper’s Gallery to find the stories mentioned in this article.)

Grammar of TV and Film: http://www.aber.ac.uk/media/Documents/short/gramtv.html

PBS :30 Second Candidate: Tricks of the Trade: http://www.pbs.org/30secondcandidate/tricks_of_the_trade/

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Bernajean Porter is a featured speaker and facilitator at national and international events sharing strategies for using technology to rediscover and accelerate joyful learning. She is the author of Evaluating Digital Products: Training and Resource Tools for Using Student Scoring Guides and DigiTales: The Art of Telling Digital Stories.

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