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Beyond

The Craftsmanship of Digital Products

By Bernajean Porter

Lining of zillions of data factoids, or ~~discovering new concepts are not~~ ^{imagining ideas, making mean-} 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

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

Content and Storyboards First

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.)

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

found that production processes and guidelines need to be explicit to increase the quality of student products. Although I offer these tips in words here, I also offer a number of sensory examples, which I point to in the text, in the StoryKeepers Gallery at the DigiTales Web site. (**Editor's note:** Find URLs under Resources on p. 31.)

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

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—

Images, graphics, or videos should illuminate content in the message through showing,

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

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.

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 try-

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

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 voice-

ing 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

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.](#)

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

es 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

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

a cow, insert a cow. Talk about a baby, see and hear a baby. These media choices are appropriate and match, but they do not necessarily extend the message.

An illuminated design is when all elements dance together to create a memorable, effective communication that is more than the sum of its parts based on author and purpose. A great design gives sticking power to the message for viewers. Openings and closings are made compelling and memorable through sensory experiences. Is the piece riveting? Haunting? Provoking? Indifference is a deadly reaction to designs.

Author(s) should strive for consistent tones and themes organizing an effective communication based on audience and purpose. If there are multiple authors collaborating on a single product, it should not look like a stitched quilt with everyone taking turns doing a section or each adding a narration their own way. A tightly designed storyboard created by the authors should give a unified feel to each product.

Unique messages result from the design choices made. View Amy's Story at Netzsmart for a haunting design using stark simplicity. PBS's :30 Second Candidate: The Tricks of the Trade

were around my neck neck neck.” Her design created a memorable hook into her story.

One author used PowerPoint as an art form for *They Were the Children of the World*, collecting small images of children who were exterminated and then using the appear-and-fade transition to flash their photos as she recited her poem. Some viewers may see the photos as too small or flashed too fast, but that was exactly the effect the author wanted. Giving viewers an opportunity to feel the brevity of these children's lives—never getting to really know them—was an illuminating design!

Whether using slide show format, video, or other multimedia, each technical element needs to artfully illuminate a message worth communicating. Like Plato, our students today have more tools to express ideas and understandings than their teachers experienced. Guiding our students to exhibit the power and craftsmanship of effective communication rather than their prowess with technology is really our ultimate goal. As I have said before, a digital product should be remembered for its soul, not the bells and whistles of the technology tools.

Resources

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

demonstrates how design choices influence the message by using the same video but changing color, film speed, ambient sounds, narration and text to develop a positive or negative election commercial.

How can a student convey an experience of being attacked without saying with words that it was scary? Krista, a DigiTales Camp participant, chose to take a series of still photos of her screaming, getting closer and closer until just her eyes are revealed, adding a special effect of a rolling white fog. By giving her voice an echoing effect combined with the images, her opening words sent out a vortex of chills—“and his hands hands hands

Amy’s Story: <http://www.netSMART.org/resources/reallife.htm#realamy>

DigiTales: <http://www.digitales.us>

(Check 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/

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 Evaluat-

ing Digital Products: Training and Resource Tools for Using Student Scoring Guides and DigiTales: The Art of Telling Digital Stories.