Key Words in Instruction

Digital Storytelling: How to Get the Best Results

by Laura Sheneman

Members of Generation Z, born in the mid-1990s to early 2000s, are considered the first generation born into a digital world. The members of this group are following in the footsteps of Generation Y or the Net Gen (born late 1970s to mid-1990s) who have been described as learners with highly developed visual-spatial skills who seem to prefer images to text; they intuitively read and communicate through images (Prensky, 2001a, 2001b, 2004). It would seem, then, that digital storytelling would be a natural fit for these generations who have the "ability to weave together images, text, and sound in a natural way" (D. Oblinger and J. Oblinger 2005).

The National Council of Teachers of English (NCTE) defines "traditional storytelling" as sharing a story using voice and gestures (NCTE 2009). The storyteller helps the listeners construct a mental image of the story as it unfolds. The NCTE's belief is that storytelling is one of the best means to pass on factual information. Digital storytelling embraces the art of traditional storytelling and reconfigures it using modern digital mediums. More specifically, "Digital storytelling is the practice of combining narrative with digital content, including images, sound, and video, to create a short movie, typically with a strong emotional component" (http://net.educause.edu/ir/library/pdf/ELI7021.pdf).

Tools Available

There are a multitude of mediums that can be used as video editing applications when creating digital stories. The list includes Windows *PhotoStory 3*, Windows *Movie Maker*, and *Animoto*. Both *PhotoStory 3* (released in 2002) and *Movie Maker* (released in 2000) are free downloads from Microsoft. *PhotoStory 3* allows the user to make videos from digital still photos, while *Movie Maker* uses both still photos and video. *Animoto* (released in 2005) differs in that it is a free Web-based application used to produce videos from still images.

An informal survey was conducted in 2009 of more than a hundred librarians from the Texas Librarian Connection (TLC listserv) and LM_Net (a listserv for school librarians worldwide) (Sheneman 2009). The group consisted of elementary librarians (forty-three public school, five private school), secondary librarians (eighty-one public middle school or high school, four private school), and four who described their employment as "other." See Chart 1.

Despite the fact that these programs have been around for several years, respondents indicate knowledge of the applications, but a much smaller percentage have utilized the applications either in the library or for personal purposes. Could this lack of use be due to the difficulty of the program itself? Or are there other reasons why librarians are not using these applications? For verification, this same survey asked the librarians to rate the ease of program use by means of a Likert scale with "0" representing "hard to use" to "5" representing "easy to use" (Sheneman 2009). Not surprisingly, the application that librarians noted was the easiest to use was also the application used most often. See Chart 2.

Chart 1: Percent of Participants Answering Yes to Familiarity and Use of *PhotoStory 3*, *MovieMaker*, and *Animoto*.
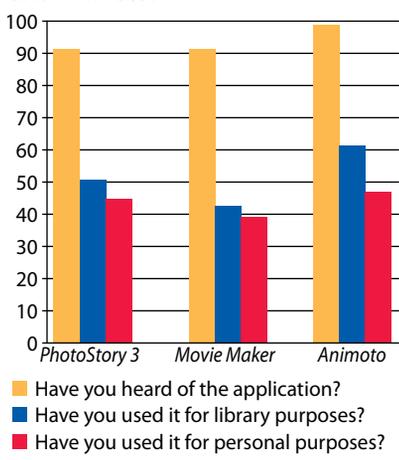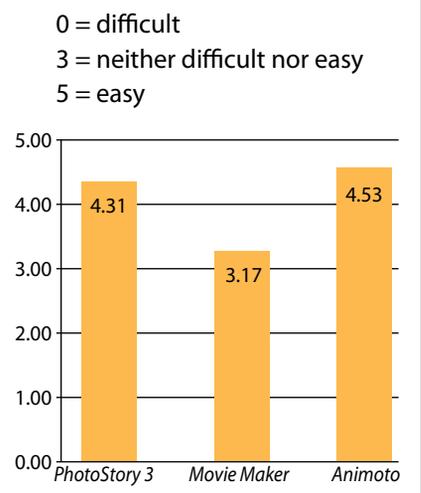
- Have you heard of the application?
- Have you used it for library purposes?
- Have you used it for personal purposes?

Chart 2: Ease of use
0 = difficult
3 = neither difficult nor easy
5 = easy

A Closer Look

To examine whether the perceived difficulty of use was connected to the librarians' perceived weaknesses of the applications, the librarians were asked to comment on the applications. According to the survey, *Animoto* was the easiest to use of the three applications. One respondent commented, "Very easy to use and looks very professionally done." However, it received the most comments from the librarians in the area of application weaknesses. Out of seventy-six comments pertaining to weaknesses about *Animoto*, the top five weaknesses mentioned were the lack of flexibility/lack of creative control/lack of personalization (thirty comments), the limitation of images allowed (five), difficulties or complaints about setting up educators' accounts (five), the application is Web-based only (five), and the final product has a canned/cookie-cutter look. Comments included, "Cuts off sides of photos, limited flexibility, can't change times for photos to display" and "All finished products look basically the same."

PhotoStory 3 came in a close second for ease of use. One comment summed up many other comments, "So much better than *PowerPoint*! The pulling together of photos, narration, and music to tell a story (or teach a lesson) is powerful!" In contrast to *Animoto*, *PhotoStory 3* received the fewest number of comments on weaknesses. The number one perceived weakness was flexibility/lack of creative control/lack of personalization (eleven comments). The remaining top five weaknesses included the restriction to upload still images only (four), image quality when using converted jpegs from other programs like *PowerPoint* (three), the amount of time needed to produce a quality product (three), and the use of application for Windows platform only (two). Respondent remarks included, "that you have to click on every slide to add a transition or timer to slide" and "some pictures get fuzzy after project is rendered."

As indicated by the survey, *Movie Maker* was the most difficult of the three applications to use. One respondent described it as "most technical of all video creators." Another said, "once you get the hang of it, it's powerful." Librarians shared forty-one comments about the perceived weaknesses of *Movie Maker*. In keeping with the survey ease-of-use results, *Movie Maker*'s greatest weakness as described by librarians was its difficulty in use/steep learning curve (twenty-one comments). The remaining items in the top five list of weaknesses include time for quality product/a lot of steps (five), locks up/freezes (five), Windows platform only (three), and different platform versions not compatible (three). Other comments included, "can be hard for users with low-tech experience to use" and "Can be intimidating—has a lot to offer—maybe need more training to become proficient."

While weaknesses were noted by the librarians, several of these issues could be addressed by noting what the application was actually designed to do and the best use of the elements. Chart 3 (page 42) should help in the decision making process.

By knowing what each application is capable of and choosing the correct match between the application and digital material, users should be more satisfied with the video-making process. Once the kinds of visuals and sounds desired have been narrowed, users can make an informed decision on which program best meets the needs. If formatting is an issue, the chart can also help make the best formatting choice. No matter which of the applications is used, the end result is a fantastic video.

Tools in Practice

The survey invited librarians to share comments about their uses of the three applications. The most frequent uses were to create book trailers (digital advertisements for a book) and library orientations.

A search using the phrase "book trailer" at *Teacher Tube* (http://www.teachertube.com) yields multiple examples of creative book trailers. Joyce Valenza encourages the use of book trailers as one way to make booktalking easier (2007). She suggested students could also use videos and audios to create their own booktalks and includes links to several examples (2007). One survey respondent described the value of creating booktrailers, "I have used both *Animoto* and *Movie Maker* to create booktrailers and found them very effective in encouraging students to read" (Sheneman 2009).

The use of digital stories for library orientation activities was another common recommendation by survey respondents. Comments included, "I did my library orientation for 3rd-5th with *PhotoStory*, including lots of actual pictures of our library, and the 3rd graders kept looking around for the camera, thinking it was 'live'" (Sheneman 2009). Another mentioned, "We used *Animoto* to create a library orientation video. It was very popular with our freshmen" (Sheneman 2009).

These ideas should stimulate interest in using digital storytelling to meet the needs of both students and faculty. It is important to note that *Animoto*, *PhotoStory*, and *Movie Maker* are just three examples of those currently available. They fall in to the educationally appealing category of "low-threshold applications" as described by Gilbert (2002, 2004). These applications are characterized as having some factor of technology, as well as factors of teaching and/or learning. Other characteristics of low-threshold applications include: 1) low cost, 2) easy to learn and access, 3) not intimidating, 4) result in positive consequences, 5) reliable, and 6) may lead to long-term change (Gilbert 2002, 2004). Gilbert further describes low-threshold applications as technologies that are simple and intuitive, requiring little work for the learner to master (2002, 2004). This sounds ideal for those working in educational settings. In order to get the results desired with digital storytelling applications, users must decide which direction to take in creating digital stories. A study of the chart (See Chart 3, page 42) will help determine what elements matter most to a project and provide guidance in selecting the best tool for creating beautiful stories!

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Educause. "7 Things You Should Know about…

Chart 3: Product Comparison (adapted from the comparison created by Dr. Pat Pecoy, Department of Modern Languages and Literatures at Furman University, Greenville, SC). Reprinted with permission.

	Animoto	*PhotoStory*	*Movie Maker*
Ease of Use Rating	4.53 (0=difficult → 5=easy)	4.31 (0=difficult → 5=easy)	3.17 (0=difficult → 5=easy)
Images Imported	Still images Video	Still images No video import	Still images Video
Edit	Add and/or delete images in an existing video Rearrange images Change the soundtrack	Photos (crop, rotate, color adjustment, red eye, remove black borders) Narration (done slide by slide; can redo one narration of one slide at a time)	Video (cut, alter beginning or ending position) Limited photo editing No audio narration editing capabilities – must erase and begin again on that section of audio
Effects	Spotlight feature to pay special attention to selected images Speed control (half or double-speed)	Pan and zoom (automatic or self directed)	Menu of effects for both image and video
Transitions	No choice	Drag and Drop basic transitions	Drag and Drop basic transitions
Title	No built-in title screen capability	No built-in title screen capability	Title screen, end credits
Audio Tracks	Music track (can import sound track or create a sound track from music provided)	Narration track Music track (can import sound track or create a sound track from within) Supports two audio tracks	Supports one audio track (narration OR music) Can use two with difficulty (narration and music)
Image formats supported	Must be in .jpeg or .gif formats and no larger than 5MB in size	.bmp, .dib, .eps, .gif, .jhif, .jpe, .jpeg, .jpg, .pcd, .pcx, .png, .psd, .rle, .tga, and .tif	.bmp, .dib, .emf, .gif, .jfif, .jpe, .jpeg, .jpg, .png, .tif, .tiff, and .wmf
Audio formats supported	.mp3	.wma, .mp3, .wav	.aif, .aifc, .aiff .asf, .au, .mp2, .mp3, .mpa, .snd, .wav, and .wma
Video formats supported	.mp4, .avi, .mov, .qt, .3gp, .m4v, .mpg, .mpeg, .mp4v, .h264, .wmv, .mpg4, .movie, .m4u, .flv, .dv, .mkv, .mjpeg and .ogv	none	.asf, .avi, .m1v, .mp2, .mp2v, .mpe, .mpeg, .mpg, .mpv2, .wm, and .wmv
Export Capabilities	Video toolbox guides user through options for best playback Email Share on SocialNetwork sites Embed on Web site Save to computer Load on iPhone	.wmv (must be viewed in latest Windows Media Player) Options for playback: On a computer Email Pocket PC Smartphone Portable Media Center NTSC or PAL	.wmv Options for playback: On a computer Save to CD Email Send to DV camera

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