

Software for Digital Storytelling

Abstract

This chapter of “Digital Storytelling in Practice” gives a short summary of many different programs that can be used to compose, store, and organize digital stories. Video, audio, and image editing tools are all described in this chapter, which is a sample—not an exhaustive list—of available technologies.

As with any use of digital technology, when you create a digital story, software is going to be a crucial part of your work. The tools that a given library will use in creating digital stories will vary widely based on the library’s financial circumstances, technology resources, and goals for the digital storytelling program. Rather than attempt the impossible task of covering every type of tool that a library might use to create a digital story, in this chapter we’ll cover the basic tools you can use on a limited budget and provide you with some resources for experimenting with more advanced tools if you so desire. As with any piece of technology, it is highly recommended that you try the tools mentioned in this chapter on a small scale before making a final decision. You may find that that the software isn’t user-friendly or doesn’t suit the task that you wanted to use it to perform. Most software manufacturers will allow you to download a free trial version, and you can usually experiment with programs when shopping at a brick-and-mortar store. Please keep in mind that this chapter is a starting point, and by no means an exhaustive list. There are hundreds of tools available that can help you tell a digital story, with more emerging every day. If you don’t like what you see here, continue searching on the Internet, and you’re bound to find a tool that fits your needs.

Tools for Creating a Storyboard

As we’ve said throughout this report, no matter what the circumstances of a given library, the story will always be at the center of any digital storytelling program. Storyboarding programs are a basic tool useful to anyone who is interested in creating a digital story. This software, which can be either downloadable or Web-based, allows you to sketch out the basic elements of a story—you can organize your narrative, add titles and descriptions, and insert audio or video as a way of outlining your ideas before you put together the finished product.

There are a number of storyboarding programs that are easy to obtain and use. **Kids’ Vid** is a free program designed for children and teachers that allows kids to create a video storyboard. My favorite free program is Atomic Learning’s **Storyboard Pro**, a program you can download for a Mac or PC that allows you to enter descriptions, titles, and even instructions for future audio or video capture. It works with a variety of audio and video editing formats and is simple to use.

Some digital storytelling programs like Brad Larson’s story kiosk or the Agora program at DOK (both mentioned in the previous chapter) are more spontaneous in nature and wouldn’t require the use of a storyboard. But if you are attempting to implement a program that involves planning and executing narratives, these tools can be a great way to get started and keep the process organized.

Storyboarding Tools on the Web

Kids’ Vid
<http://kidsvid.altec.org>

Storyboard Pro

<http://www.atomiclearning.com/storyboardpro>

Video Editing Software

If you are purchasing a computer to use for your digital storytelling program, you'll need to decide whether you want a Mac or PC. If you're using your existing equipment, this decision has been made for you. PCs and Macs both have their own video editing software that enables the combination of different media like images, sound, video, animation, and more into a single story. In this section we'll look at both PCs and Macs, as well as some pieces of online software that include free components.

Windows-Based PCs

A Windows-based machine with Windows XP or Windows Vista almost always comes with the **Windows Movie Maker** program installed. The program may be buried in the Program Files folder on the hard drive, but you can add it to the Start menu for easier access (you probably don't want your patrons rummaging through your program files).

Anecdotally, I've heard mixed reviews from people who have used Windows Movie Maker to create digital stories. As with many Windows programs, some people have complained that Movie Maker is clunky—that it has a high learning curve, doesn't always perform well, and has limited functionality. One limitation worth noting is that there is only one track for audio, so you won't be able to create a story that has music and narration overlapping—with Movie Maker, it's one or the other. I've also heard positive feedback from other librarians—Windows is the dominant operating system on the market, and many librarians are used to working with Windows programs and feel that Movie Maker gives them everything they need to help patrons create good digital stories.

In order to effectively create digital stories using Movie Maker with a desktop or laptop PC or a netbook, you'll need at least one gigabyte of memory and 80–120 gigabytes of hard drive space available on your machine. If you work with less than this, you'll be dealing with extremely long waits to render your movie and constantly risking program failures and system crashes. If you're interested in using a netbook, you'll need to connect it to a monitor, as the screen will be far too small for you to view your movie. If you don't have a spare monitor, used monitors are often available at a very low cost in used electronics stores or on websites like craigslist or eBay.

If you choose a different PC-based video editing program, the system requirements should be listed in the program instruction manual. If you're not sure if your computers are up to the task, check with someone knowl-

edgeable—if you don't have an IT specialist or an employee at the library who can help, try asking someone at a software store.

Windows Movie Maker How-To Center

www.microsoft.com/windowsxp/using/moviemaker/default.mspx

In spring 2009, the Lamont Library at Harvard University offered Movie Maker training for library staff. While the library does have other software for multimedia presentations, it offered four sessions for learning how to use the program. According to Harvard, the impetus for this training program was the university's desire to expand multimedia collections for research and increase digital participation in the classroom. In addition, several university museums are digitizing their content and see this medium as a way to enhance presentations.¹

The State Library of Queensland in Australia has a collection of digital stories as an ongoing project of its collection. People can attach their own stories to the collection to help create a community archive. The library has what it calls a Mobile Multimedia Lab that has the equipment necessary to create a digital story or oral history. It has also developed an extensive manual of hardware and software guidelines for digital story creation. The manual provides helpful, step-by-step instructions on using Windows Movie Maker, as well as add-on software (some free and some with a cost) to enhance digital stories.²

Macs

Most Macs also come with digital media creation software already installed. Apple's iLife suite includes the iMovie, iDVD, GarageBand, iWeb, and iPhoto applications, which allow users to create, store and organize audio, video, music, photographs, and Web content and use their computers to create playable DVDs.

iLife

www.apple.com/ilife

The video editing program **iMovie** is similar to Windows Movie Maker. It allows users to import audio, images, movies, and animation into a storyboard-style interface and create movies of any length. iMovie also enables users to add effects to their films, and unlike Windows Movie Maker, it gives you the ability to incorporate multiple tracks, so voice narration, music, and sound effects can all be used simultaneously. The **iDVD** program works with iMovie to easily convert these movies to DVDs.

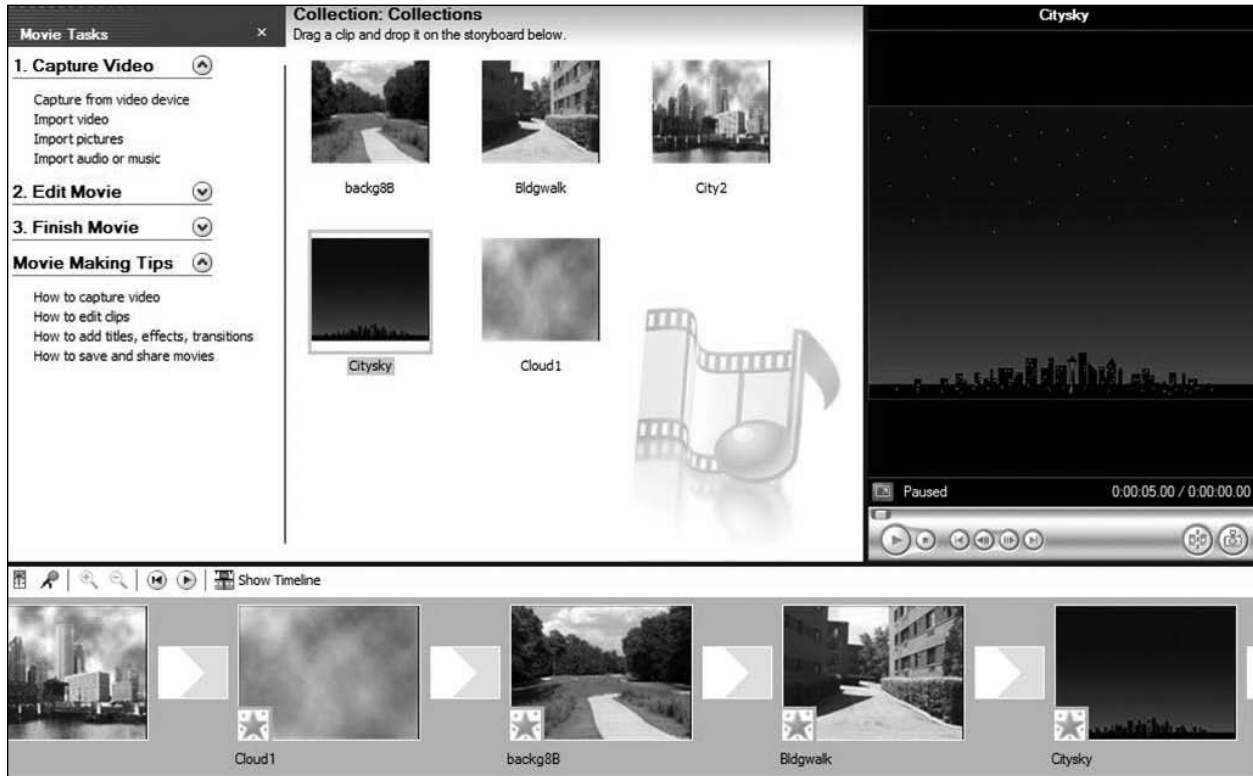


Figure 16
Windows Movie Maker interface.

Many libraries offer access to and classes or workshops in Macintosh's iLife software. The University of Tennessee Library has a project called the Studio that offers students courses on iWeb, GarageBand, iDVD, and iMovie. The course webpages are integrated with the library and offer additional resources on these programs.³

Other Video Editing Software

While computers and their proprietary software are the basic building blocks for creating a digital story, there are more advanced tools available for those who have honed their video editing skills.

Final Cut Pro is a high-end video editing program made for Macs. Many professional films and videos have been created using this software. There are an extensive variety of editing tools, and a large number of effects and transitions that can be created with this program. The editing interface is highly customizable, so it can be arranged to fit a user's exact needs. While it does cost slightly over \$1,000, a scaled-down version called Final Cut Express may be purchased for about \$199.

ImaginOn, a branch of the Public Library of Charlotte and Mecklenburg County has one Final Cut Pro station in Studio i, its animation and music editing studio. Teen interns and staff use this studio to create higher-end prod-

Final Cut Pro

www.apple.com/finalcutstudio/finalcutpro

Final Cut Express

www.apple.com/finalcutexpress

ucts, particularly school projects, contest entries, or theater performances.

Pinnacle Studio is video editing software for Windows-based computers. Photos and videos can be imported from a variety of sources including a camera, DVD player, or VCR. Users can create high-quality audio files, including voice recordings, and add video effects and transitions to visual content. Pinnacle Studio is available in three versions: Studio HD for about \$50, Studio Ultimate for about \$100, and Studio Ultimate Collection for about \$130. The costlier versions have more features.

Corel's **VideoStudio Pro** costs about \$70, but a trial version is available for free. The program provides a folder-style platform for organizing various digital media that can

Pinnacle Studio

www.pinnaclesys.com/PublicSite/us/Products/Consumer+Products/Home+Video/Studio+Family

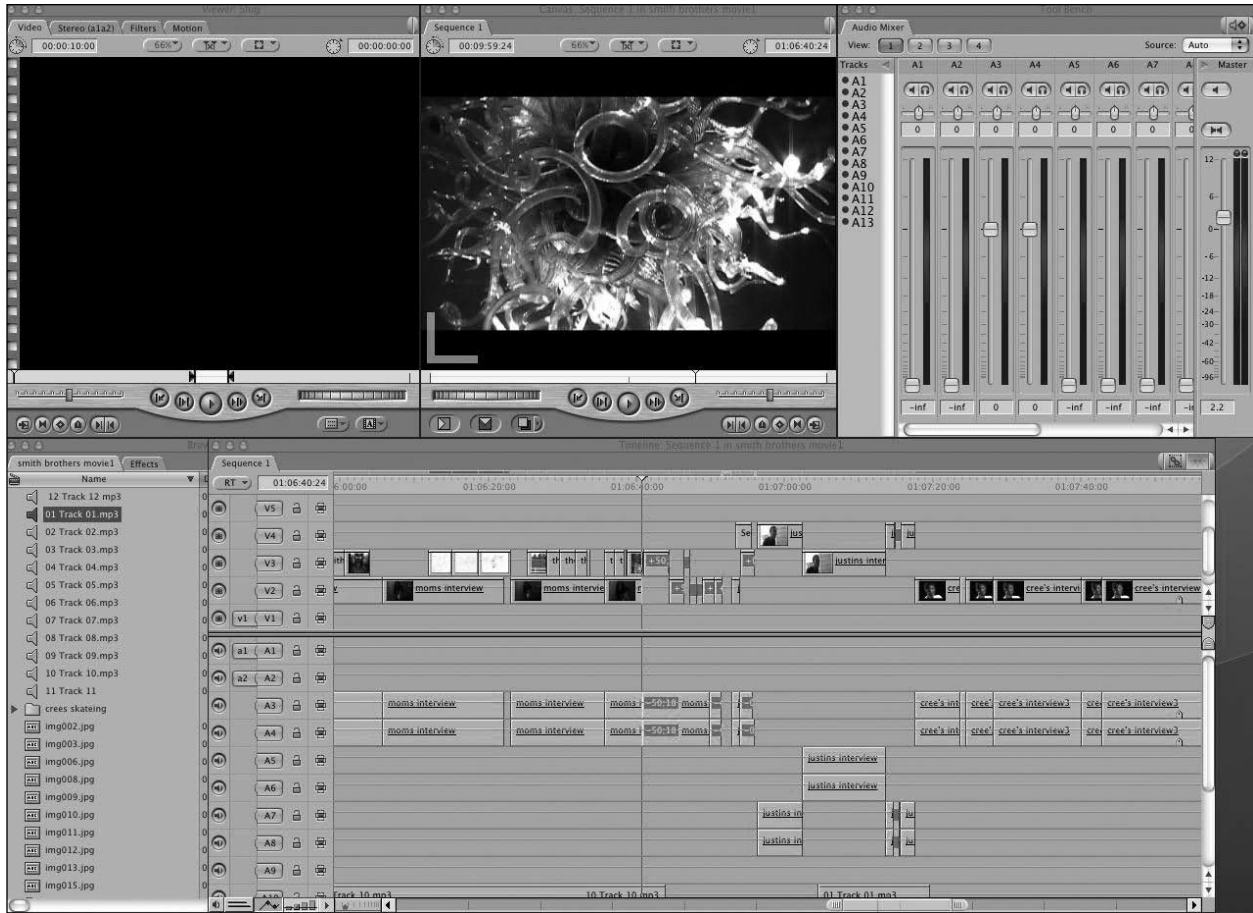


Figure 17
Editing a digital movie using Final Cut Pro.

be extremely helpful in organizing materials for a digital story. The chroma key feature, which allows users to fade two images together using a color scheme, is also available. The program also enables users to import video from multiple sources and burn the final product to a DVD.

Producing Video with Web Applications

For libraries with minimal hard drive space or a minimal budget, there are also Web-based applications that can help create video. While these aren't top-of-the-line video editing software packages, they still allow multimedia to be assembled to create a digital story. These applications can also be used to create a more dynamic alternative to a PowerPoint-style presentation. Some of these applications can create a fairly complex finished product and can serve as a fantastic introductory tool to multimedia work, especially since they are nearly free. Using these tools may also be a great way to assess the multimedia software needs of your library or organization and consider what you might experience with more costly software. The Web applications are also great resources for creating some-

thing quick when time is limited. In many cases, the final products can be shared online, so they can also be an exercise in social media storytelling.

Animoto is a Web service that takes your images, videos, text, sounds, and a music soundtrack that you choose and creates an MTV-style video for you. Animoto analyzes your media before it creates the video, ensuring that no two videos are alike. For \$3 you can purchase one non-commercial video, and for a \$30 annual subscription you can produce an unlimited number of videos for noncommercial use. Animoto will also create commercial videos for those who pay a \$249 annual subscription, and this price includes access to a collection of video and music licensed for commercial use. There is also an educator's edition available for use in the classroom. Many teachers have used this version in conjunction with PowerPoint slides to give students the chance to create videos. More complex digital stories can be made with other tools, but this one is a great way to get started with multimedia. Joyce Valenza, teacher-librarian at Springfield Township High School in Pennsylvania, frequently blogs on the *School Library Journal* site about Animoto.⁴

VoiceThread costs about \$60 for an annual subscription, although it offers different features for different account types with different costs. Like Animoto, it allows users to import audio and images. The key VoiceThread feature is social in nature. Projects can be created so that only certain people are allowed to leave comments, or they can be open to the public. Users can leave comments by text, audio, or even video. The comments form a frame around the central image or video. This is another tool with a low learning curve that allows the user to experiment with creating a multimedia story. VoiceThread presentations were used to show librarians how to celebrate YALSA's Teen Tech Week.⁵

National Geographic's **Wildlife Filmmaker** allows nature enthusiasts to make films using animal clips, videos, sounds, captions, and more. This is a great site for introducing students to movie editing for storytelling because its interface is based on a timeline, a tool with which many students are familiar. While ads are part of the site, they are age-appropriate.

Music and Sound Software

Audio, which could include music, sound effects, and narration, is a key component of digital storytelling. There are many free audio creation sites and a good deal of programs that have audio creation tools built in.

FindSounds is a search engine that allows the user to search the Web for sound effects and musical samples. The site also offers FindSounds Palette, software for Windows that allows the user access to even more sounds and music files. The price for Palette ranges from \$50 to \$350 (or "Internet Special" prices from \$20 to \$100), depending on how many audio files you want to manage.

GarageBand is a music and audio creation program, a part of Apple's iLife suite that provides an easy-to-use

framework for creating songs. Real instruments can be connected to the computer by USB, or music can be made directly on the computer using digital instrument sounds already in the program. GarageBand can also record users' voices, with or without music, and enables them to easily add effects to their voice, which can prove a useful tool when creating a digital story.

Audacity is a free, open source program for Mac, Windows, and Linux platforms. It has a tape recorder interface at the top of its screen. Tracks can be layered one on top of the other and microphone levels adjusted so that the sound does not come out distorted. This is a very convenient program to use—most USB microphones will work, including a headset with microphone attached. Files can be saved in a variety of formats and then imported to your favorite video editing program.

The **iTunes** software can be used with Apple and Windows platforms. The software stores and organizes music and also gives access to Apple's extensive online music store. You can use iTunes to export music in a variety of formats.

Photo Editing Software

Adobe Photoshop is one of the most popular and comprehensive image editing programs. Photoshop uses a layering system that allows users to add a wide variety of filters and effects to images and to merge images with texts. Photos can be imported from and exported to a wide variety of formats. The program, which runs on both PCs and Macs, costs around \$700. There is a lower-cost version called **Adobe Photoshop Elements** that costs about \$100. The basic structure of the program is similar, but the features are scaled down considerably.

iPhoto is a Mac-based program that allows users to organize and edit their photos. It is part of the iLife suite

VideoStudio Pro

www.corel.com/servlet/Satellite/us/en/Product/1175714228541#tabview=tab0

Animoto

<http://animoto.com>

VoiceThread

<http://voicethread.com/#home>

Wildlife Filmmaker

<http://animals.nationalgeographic.com/animals/article/filmmaker.html>

FindSounds

www.findsounds.com

FindSounds Palette

www.findsounds.com/palette.html

Audacity

<http://audacity.sourceforge.net>

iTunes

www.apple.com/itunes/overview

Adobe Photoshop

<http://www.adobe.com/products/photoshop/photoshop>

Adobe Photoshop Elements

www.adobe.com/products/photoshopelwin

GIMP

www.gimp.org

Picnik

www.Picnik.com

Pixlr

www.Pixlr.com

Splashup

www.Splashup.com

of software. iPhoto is a tremendously popular program— anecdotal feedback from those using this software has been overwhelmingly positive.

GIMP is a free, open source photo editing program with a set of features similar to Photoshop. The program works with Windows, and is small enough that it can be run from a flash drive.

There are several free online photo editors that will do the trick as well. **Picnik** is an online photo editing tool that is designed for ease of use. It allows users to upload a picture and apply simple effects and edits. Premium accounts are available for \$25 annually. Two other popular alternatives are **Pixlr** and **Splashup**.

Conclusion

In many ways, the evolution of storytelling follows the evolution of technology. From prehistoric to modern times, traditional storytelling has always reflected the culture of the storyteller, and the methodology has always been the available technology. In the Internet age, a technological revolution is leading to a storytelling revolution—a new, interactive form of storytelling that uses digital tools is

transforming the practice for the twenty-first century.

Regardless of the tools you use, the budget you have, or the type of institution you work for, a digital storytelling program is an outstanding way to facilitate learning and community. New tools for digital storytelling are emerging every day, and the examples are everywhere—in libraries, on television, on the Internet, and in schools. Digital storytelling is more than just an engaging form of entertainment; it is an educational tool and a way to bring people together. There are countless ways to get involved in digital storytelling and countless benefits for those who do.

Notes

1. Harvard College Library, “Lamont Offers Movie Maker Training to Students and Staff,” April 3, 2009, http://hcl.harvard.edu/news/articles/2009/movie_maker_training.cfm (accessed Sept. 1, 2009).
2. State Library of Queensland, “Resources,” Queensland Stories website, www.qldstories.slq.qld.gov.au/home/resources (accessed Sept. 1, 2009).
3. University of Tennessee Libraries, “Studio Short Courses: iLife Series,” The Studio website, www.lib.utk.edu/studio/learn/iDVD.html (accessed Sept. 2, 2009).
4. Joyce Valenza, “Announcing: Animoto for Education,” NeverEndingSearch blog, April 4, 2008, www.schoollibraryjournal.com/blog/1340000334/post/1560024356.html (accessed Sept. 2, 2009).
5. “Teen Tech Week,” YALSA wiki, http://wikis.ala.org/yalsa/index.php/Teen_Tech_Week#Tune_in_40_Your_Library_Resources_for_TTW_2008 (accessed Sept. 2, 2009).

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Abstract

The rapid technological advances of the early 21st century have opened up new doors for the age-old practice of storytelling. While traditional storytelling is still alive and well, the practice of digital storytelling, a broad concept that encompasses the idea of using digital technology and multimedia interaction to share stories, is emerging as a useful tool for librarians and educators. In this issue of *Library Technology Reports*, we'll look at how digital storytelling has emerged from the timeless practice of traditional storytelling. We'll explore how digital storytelling has been used in different contexts to aid educators and how librarians can effectively implement digital storytelling programs. We'll also take a brief look at some of the technological tools that can be used to tell a digital story.

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