8

Building Nonlinear PowerPoint Portfolios

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Focus Questions

- How can hyperlinking add value to e-portfolios?
- How can PhotoShop Elements be used to accomplish basic image editing?
- What programs can be used to accomplish quality sound editing?
- What programs can be used to accomplish quality digital video file editing?

❖ INTRODUCTION

In Chapter 7, the discussion centered on the use of PowerPoint in its most common form. The PowerPoint presentation is, most commonly, a sequence of slides containing information that is viewed in order, from a title slide through the sequence to the end of the presentation. It bears mention here that the term *PowerPoint presentation* refers to the file, not a method of instruction, lecture, or speech. A speaker does not do a "PowerPoint presentation" but rather uses a PowerPoint

presentation to assist in communicating the information contained in the instruction, lecture, or speech. The linear sequence of most PowerPoint presentations, aside from being the most common use of the program, is also the most common way that we all learn to use the program. It is the way that we are used to seeing the program used to illustrate important points in a lecture, highlight important facts of a speech, and communicate salient facts in an instructional environment. In this role, PowerPoint is not much different from the older technology of the overhead projector.

In the era of the overhead projector, transparency after transparency was exposed on the stage of a projector in order to throw images onto a large screen. With information sometimes masked by a piece of paper to hide material not yet discussed, the parallel of this technology with PowerPoint is obvious. Making a long presentation using multiple transparencies does lead to the horror story of many presenters. The story centers on that time many of us remember when the transparencies were out of order during a particularly important presentation! It is hard to forget the embarrassment as we searched through the stack of transparencies to find the one we really wanted. PowerPoint solves this potential disaster in that the presentation, moving from slide to slide, is set ahead of time by the presentation author. However, the rigid format of PowerPoint in its linear design can be a detractor in the use of the program.

Consider an example that would involve a question asked that is answered on a future slide. Using PowerPoint in its more common use, the presenter needs to click on the tool in the lower-left corner of the presentation slide and select the appropriate page from the options that appear in a window. Compare that to the need to simply shuffle through the transparencies to select the one that contains information that can easily answer the question asked. The ability to easily shift from slide to slide in an order other than originally planned is both a strength and a weakness of the overhead projector. Although the example above demonstrates how shuffling can be used to easily answer an unexpected question, the horror story of mishandling slides returns to mind.

One can also argue that the use of PowerPoint is warranted due to the ease of illustrating, animating, and adding other special effects to the presentation. In Chapter 7, adding special effects, illustrations, sound, and even movie clips is reviewed. These additional features, however, are added to the PowerPoint presentation only after the basic layout of the presentation is planned and entered on the slides of the

presentation. Chapter 7 uses a storyboard approach to planning, but other types of planning (an outline format as an example) may be used. The need to plan the presentation is actually a strength of the technology, for without careful planning, the order and type of slides needed become as difficult to consider as the content of the presentation.

Other benefits of the PowerPoint presentation result from the time invested to create and save the presentation on media that allow an author to easily change information at any point in the future. Updating information contained on each slide is easy and does not require that slides be reprinted as they would have to be in a transparency-based augmentation of a speech using the overhead projector. With some minimal effort, a PowerPoint author can adjust colors, the slide sequence, and even the format of the slides. The trade-off for reaching the point when an author can realize the benefits of PowerPoint is the investment of time necessary to create the presentation ahead of the scheduled time of the instruction, speech, or lecture. Once the PowerPoint presentation is created, then the benefits can be enjoyed. What remains, then, is a discussion as to whether the PowerPoint program can be used to create an e-portfolio.

In the linear format, the PowerPoint program has an obvious limitation. A linear form of an e-portfolio is contained on the CD that accompanies this book. In this example, an author presents the standards and reflections in the work, followed by images of the candidate's performance that are also saved on slides contained within the presentation. For example, during an interview, the teacher candidate might provide a copy of the presentation for the convenience of the interviewer. But what would happen if the interviewer wants to see a particular piece

Refer to the linear portfolios on the Student Resource CD

of work that is toward the end of a presentation, or what if the only item of interest is a classroom management plan that is at the end of the presentation? The interviewer would have to know how to navigate using the window activated from the icon in the lower left of a slide during the slide show or would have to page through the presentation to the end. In a hardcopy portfolio, the interviewer would go to the index, find a page containing the particular piece of work of interest or the page containing the résumé, and skip directly to the pages of interest. Using the PowerPoint presentation in the more common format, the viewer is not easily able to go to random pages of interest. This chapter will focus on the use of PowerPoint in the construction of a nonlinear presentation through the creative use of the hyperlink, which can increase the ability of PowerPoint to be used in a less structured and less linear manner.

❖ MAKING POWERPOINT LESS LINEAR BY HYPERLINKING

The use of hyperlink was introduced in Chapter 7. This feature of PowerPoint can be used to link both within and outside of the presentation. Within the presentation, the hyperlink can be used to enable the program to move from one slide to another slide. The slide to which the hyperlink points can be the next slide, a previous slide, or a slide placed ahead of the next slide. The order of the slides then becomes more random based on which hyperlink is selected. Hyperlinks can be established to allow the slides to be viewed in an order that meets the need of an interviewer or of a viewer with a specific interest. In such a use, it is best to do this from an index that allows the easy identification of the slides that might be of interest to a person viewing the presentation. Two examples of such e-portfolios are on the CD accompanying this book in the Chapter 8 folder. They are by preservice teachers who are responding to a set of unit standards by preparing a program exit e-portfolio.

Refer to the nonlinear portfolios on the Student Resource CD

Using this organization in an e-portfolio, the preferences of the viewer are addressed. Perhaps the viewer is really interested only in the content contained on Slides 4 and 6. The use of hyperlinks within the program can make it possible to view only those slides. The order of the presentation could then be as follows: moving from Slide 1 (the title) to Slide 2 (the index), using the hyperlink to move ahead to Slide 4, hyperlinking back to Slide 2 (the index), hyperlinking ahead to Slide 6, and finally hyperlinking back to Slide 2 before ending the presentation. The presentation could also be viewed, using the hyperlinks, in the following order: Slide 1, Slide 2, Slide 6, Slide 2, Slide 4, and finally Slide 2. Hyperlinking from one slide to another slide within the presentation is called internal hyperlinking. Through the use of internal hyperlinking, the order of the slides selected for viewing is no longer a fixed sequence but is, rather, dependent on the needs or preferences of the viewer.

Hyperlinking to locations not a part of the presentation itself is called external hyperlinking. External hyperlinking can make a PowerPoint presentation even more rich by enabling quick linkages to a variety of files and even Internet sites. The use of the hyperlink can enable the viewer to "jump" from the PowerPoint presentation to word processing, database or spreadsheet documents, illustrations, or even sound or movie clips. This can be helpful to limit the size of the

PowerPoint presentation by making it unnecessary to include the external material within the presentation. It is also evident that if the material is already prepared in some format, it is unnecessary to duplicate the effort of copying and pasting, sizing, and formatting the information for inclusion in the presentation. Furthermore, the inclusion of a large amount of information in the actual presentation is in opposition to one of the primary rules that should guide the use of the presentation software—limiting the information to summary or important points only. The presentation should not include, for example, a lengthy report or extensive spreadsheet. However, if there is an interest in viewing these documents, hyperlinks can be written to "jump" to the file that contains these documents. An example used earlier might apply here. A presentation could be made as to when it is appropriate to use a specific business form, with a hyperlink to this form to be used only if necessary. As applied to the portfolio, the hyperlinks can be to samples of work from slides that are keyed to specific standards or requirements set for the portfolio. The manner in which hyperlinks can be created is outlined in Chapter 7.

The structure of nonlinear PowerPoint presentations can be further clarified by reviewing Figure 6.2 in Chapter 6, which shows an example of a presentation that includes three standards, four reflections, and four artifacts in a linear format. The viewer goes through the presentation in a more common way, from slide to slide, as the presenter or viewer clicks through the presentation. A nonlinear presentation is portrayed in Figure 6.3 (Chapter 6). This second nonlinear presentation features the same three standards, reflections, and four artifacts but enables the viewer to move randomly among the three standards, four reflections, and four artifacts. The viewer can choose the standards, reflections, and artifacts that are of interest. The viewer can navigate to and move among this information in a nonlinear manner by using hyperlinking to "jump" from slide to slide and access artifact files from appropriate reflections.

In Figure 8.1, the basic structure of the hyperlinked nonlinear PowerPoint presentation approaches the standard of an excellent e-portfolio. The difference between Figure 8.1 and Figure 6.3 is that the artifact files that are documents are linked to other files. MS Word documents can be hyperlinked much as PowerPoint can be. It can be accomplished either through the pull-down menu or from the icon on the toolbar. An example of the use of this "deep linking" would be possible using the example discussed earlier in the book. An e-portfolio could link to an MS Word document containing a new blank form that

Figure 8.1   Nonlinear Presentation Format That Will Run as a Normal Presentation Along the Dashed Line But That Can Use Hyperlinks to Become Less Linear Along Solid Lines
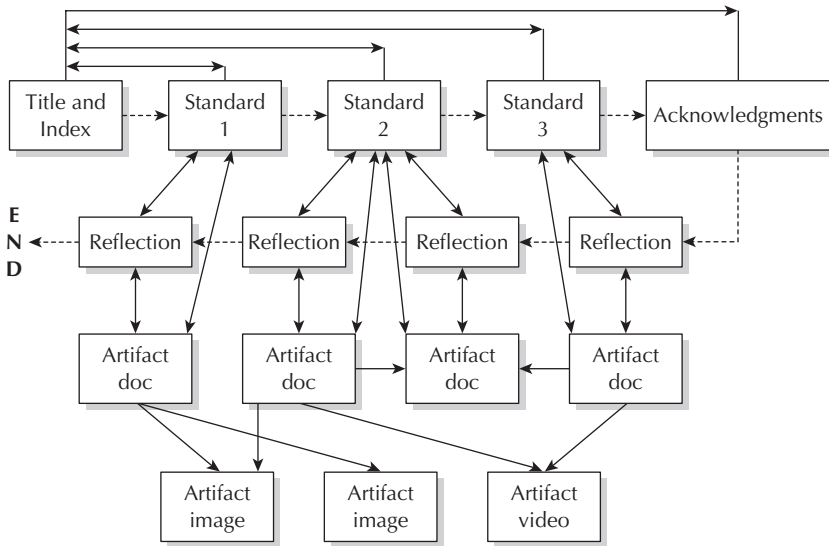
NOTE: This nonlinear presentation format will run as a normal presentation along the dashed line but can use hyperlinks to become less linear along solid lines. This model presents three standards with seven artifacts. Note that those artifacts that are documents can be hyperlinked, but image and video clips cannot be hyperlinked to other artifacts.

may be used in a business. That document could, in turn, be linked to a JPEG image of a completed (handwritten) form to illustrate a real business application of the form. Another example would be a hyperlink to a document containing a teacher's lesson plan that is, in turn, linked to a video clip of the lesson as it was taught.

The artifact files, separate from the presentation, will allow constant updating of the presentation simply by adding or removing hyperlinks to artifact files separate from the actual presentation. If a new spreadsheet project is better than an earlier one, a new hyperlink to the new file and the deletion of the old hyperlink will allow the updating of this particular artifact that might better meet a specific standard required in the e-portfolio. If a new lesson is taught and is more successful in practice than the earlier lesson, then this new

sequence can be placed in an updated e-portfolio. The use of an index and the hyperlink feature of PowerPoint is absolutely essential in the process of creating a PowerPoint-based e-portfolio. It will, in fact, make the e-portfolio stand out from the ordinary "print and artifact" portfolios of earlier times.

❖ BUILDING A STRUCTURE FOR AN ELECTRONIC PORTFOLIO

The structure that is being suggested here is based on the experience and field testing of our efforts in the e-portfolio area. Several slides are absolutely necessary and include a title slide, an index slide, a slide for each standard, a slide for a reflection regarding how the selected artifacts meet each standard, and a slide of acknowledgments. The index will have links to slides of each standard. The slides of each standard will have hyperlinks back to the index (within the presentation) as well as hyperlinks to those artifacts that are selected for inclusion within the e-portfolio. It is clear that regardless of the purpose of the portfolio, there will be some content that is nonnegotiable and set by those requiring the e-portfolio. Regarding the majority of the portfolio content, it is recommended that e-portfolio authors be provided with some degree of freedom in selecting those artifacts that they think best define their mastery of a standard. Furthermore, the reflection should clarify what the standard means and how the artifact demonstrates that the standard is met. Thus, a structure of an e-portfolio will most closely resemble the diagram contained in Figure 8.1 as a nonlinear PowerPoint presentation.

Authoring the E-Portfolio

The first step in authoring an e-portfolio is selecting the standards that will be addressed. The specific structure of the e-portfolio will emerge from that decision. Careful planning will then occur with the portfolio author selecting those artifacts that are thought to most closely meet the requirements or standards. It is advisable to first carefully plan the presentation through the use of a pencil-and-paper top sketch—generally, the slide order and the links that will have to be made. Once the presentation is generally planned, collecting and digitizing the artifacts should occur first. It is highly recommended that all

artifacts for the portfolio be collected in a single section within "My Documents" in the Windows environment, in a single file in the Macintosh environment, or on other removable media (flash drive or portable hard drive media).

As an e-portfolio author, you will be collecting a number of different types of files for use within the PowerPoint presentation and for objects outside of the presentation to which hyperlinks will point. Selecting these artifacts is the first challenge that you face, and the second will be saving these files in a digital format that can be easily accessed by the PowerPoint program. PowerPoint does not work equally well with all formats of files. It is recommended that the PowerPoint portfolio author convert files, as often as possible, to the equivalent file type produced by MS Word, Access, or Excel. Furthermore, it is recommended that the graphics files be converted, scanned, or photographed as JPEG images, and video should be saved in MPEG format. For many of these links, the use of QuickTime PictureViewer and QuickTime Player has increased the PowerPoint capability. Figure 8.2 lists common formats that have been used with the combination of QuickTime products and PowerPoint with no problem.

Converting files that are not compatible with PowerPoint is possible using "Save As" options or one of several programs designed to edit graphics and movie files. Examples of these programs include iMovie (on the Macintosh) and Adobe PhotoShop Elements. The files are opened, and using the "Save As" command, the file type can be changed to a new format. Altering the files to a readable file can be just that easy. It is important to make sure that all files are in a format that can be opened with a hyperlink from the PowerPoint program. Linking to a .gif image, for example, will probably result in a statement that the

Figure 8.2   Formats in Which Nondocument Artifact Files May Be Saved for Use With the PowerPoint Portfolio

Artifact type	Artifact formats
Graphic images	.emf, .gif, .jpeg, .png, .pict, .bmp, .rle, .dib
Video clips (movies)	.mpg, .mpeg, .mov, .wmf, .avi, .qt (quicktime)
Audio formats	.midi, .wav, .mp3

program was unable to open the image. A document that will not open is sure to interfere severely with a clear and fair assessment of an e-portfolio. Remember that the purpose of an e-portfolio is for it to be easily read by a viewer, and such technical glitches will complicate the task for the viewer and frustrate efforts to use the e-portfolio for whatever purpose is intended. Therefore, it is critical that the e-portfolio undergoes testing before its final submission.

As suggested earlier, it is recommended that all artifact files be saved to a specific folder. An alternative would be to save in-progress e-portfolio work in a partitioned space on a server to which access is controlled. The partition is a virtual "wall" defining a space that is accessible to only those who have authority to enter. Password protection of that space is an example of control. However, if the server is accessible by remote users, the potential of a problem is exacerbated. Security measures become necessary if there is the possibility that many people may be able to gain access to server space. This need for security is to ensure, as much as possible, that your files are not used by anyone else. Although there may be considerations related to copyright, there may also be ethical considerations. There are reasonable expectations that the images or examples used in a single e-portfolio will not be borrowed for publication in thousands of e-portfolios. It is important, then, to make sure your space on a server is partitioned and protected. Furthermore, it is important not to share the means of protection (e.g., tell others of your password). This may seem picayune, yet a great deal of work goes into your files, and they deserve a level of protection.

❖ EDITING IMAGES USING BASIC PHOTOSHOP ELEMENTS CAPABILITIES

Adobe PhotoShop is one of the most widely used graphics editors on the market. It is, unfortunately, relatively expensive. Fortunately, however, a scaled-down version of PhotoShop is available and is capable of doing all of those basic functions described below. The following comments and instructions are intended only to provide a very basic idea of the many capabilities of the PhotoShop Elements application. It is not intended that this be a manual for anything other than a few of the many features that are directly related to the production of well-done e-portfolios. The features that will be discussed are limited to the use of filters, cropping, editing images with brightness and color, and sizing. Other graphics editors are available as shareware or prepackaged with

some computer purchases. However, Adobe's PhotoShop Elements is a valid alternative to the much higher priced (but more complete) full version of PhotoShop and is typical in terms of its operation. Any of these programs would be useful to beginning e-portfolio authors to correct some of the most common problems.

The use of images of individuals within your portfolio is a topic that has already been discussed. There is a need, moral and legal, to have releases from those persons who are included in your portfolio. A signed permission form is the only recommended way to proceed when obtaining this permission. Verbal permissions may be legally binding, but they are notoriously difficult to document. A sample letter and sample permission form are provided in Figure 8.3 and Figure 8.4, respectively. It is important that the permission form identifies the reason that the e-portfolio is being developed, the method and extent to which the e-portfolio will be shared, and the limits of the sharing. Although the actual signed statements are not necessary in the presentation, it is necessary to acknowledge the fact that the permissions have been received. What happens, however, if there is a feature in a slide or artifact that ought not be recognized? The image can be filtered. What if you want only part of the image? The image can be cropped. What if the light was too bright and the image is "washed out"? You can adjust for the brightness of the image. What if the image is too small or too large? You can resize the image. How these things are accomplished is the focus of the rest of this section.

Taking a Part of the Image: Cropping

Taking a part of an image is called *cropping.* An image that is to become part of an e-portfolio might simply have too much background to be effective in demonstrating the standard or requirement the image is to address. It is possible to decide what part of the image is important given the purpose for which it is selected and then to outline that region of the image. PhotoShop Elements allows the user to literally cut that portion of the image out of the rest of the image and to make a new image consisting of only that cut-out section. Cropping allows the portfolio author to direct a reader's focus to what is important. An image of a classroom in which the teacher is assisting a student may meet a standard, but the focus may not be obvious. The focus intended might be the teacher's individual helping. That could be emphasized by cutting out only that part of the picture showing the teacher and the student being helped while disposing of the rest of the class. A student's use of

technology by using computerized lab interfacing during a chemistry experiment may be more important than other students working in groups at the same time. Cropping to limit the image to the student working with the experiment and the computer lab interfacing setup may provide a better artifact. Purging extraneous and possibly distracting portions of an image can strengthen an e-portfolio immensely.

Figure 8.3   Sample Cover Letter to Obtain Signatures on a Permissions Form

(Your name and your address here)

Insert date

Dear ("Person" whose image or material you wish to use)

As part of my (job search or professional requirements), I am completing an electronic portfolio for presentation to (prospective employers or to those interested in assessing my professional development). I am including many things within this portfolio, including samples of my work and other evidence that I meet (requirements or standards), which are the purpose of my portfolio development. All of this information is being saved in a digital form, and it is my intention to provide copies of the portfolio to those individuals who have a reason to view the portfolio. I may also use the portfolio for (large group presentations or any other use you might define).

I would like your permission to include (photos or other work), which (includes or identifies) you (as a focus of the photograph or as the source of work samples). I believe that this (photo or work) will contribute significantly to my ability to demonstrate that I meet the (requirements or standards) defined by the portfolio. If you have any questions, please feel free to call me at (your phone number here). If you would agree to provide permission, I would appreciate your completion and return of the attached permissions form in the attached postage-paid envelope.

Sincerely,

(Sign your name)

NOTE: The information within parentheses needs to be customized for your particular needs.

Figure 8.4   Sample Permission Form

Permission to use material

I am providing permission to (portfolio developer name here) to use material that (includes my image or my work—or that of my child) within an electronic portfolio that (portfolio developer name here) is developing. It is recognized that neither (my own or my child's) name will be used within the electronic portfolio. The portfolio will simply refer to the fact that all images or work belonging to other persons are used within the portfolio with permission.

The reason for the development of the portfolio is to (define the purpose here). Your (or your child's) image or work used within this portfolio still belongs to you (or your child) with all copyright and ownership rights. The portfolio will not be distributed as a commercial product, and confidentiality of all persons providing permission to use their work will be maintained to the fullest extent possible.

With this permission, I release (portfolio developer's name here) from liability that might arise from the inclusion of (my or my child's) (photo or work) within this portfolio.

_____
Print your child's name

_____   _____
Your signature   Date

_____
Print your name here

_____   _____
Address   Phone number

_____

_____

NOTE: The information within parentheses needs to be customized for your particular needs. "My or my child" and "your or your child" refer to the person providing permission for use of his or her material.

To crop an image, you must start PhotoShop Elements and then open the image. Follow the steps below to crop an image:

- Open PhotoShop Elements.
- From the pull-down menu, use "Open" to select the image to be cropped.
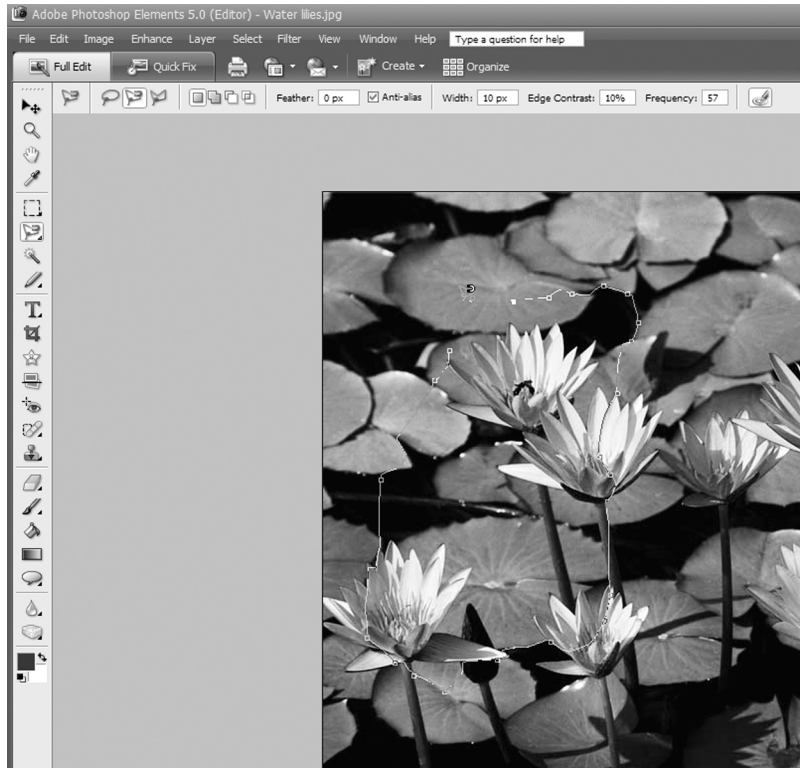
- Select the crop tool (rectangle) from the toolbar on the left verti-
  cal toolbar.
- Click and hold using the crosshair to define a region to be
  cropped.
- Let go of the button to select the region.
- Click and hold within the box to reposition.
- From under "Edit" pull-down menu, select "Copy" to place the
  image on a clipboard.
- Under the "File" pull-down menu, select "New" and then
  "Image From Clipboard."

Adjusting the Size of an Image

When cropping or importing an image from another source, it is
possible that the size of the image may not be appropriate for the
intended use in the e-portfolio. Whenever an image is imported into

the PowerPoint program as a JPEG image, it is usually possible to click on the image and find the "handles," which appear as squares on each corner and in the middle of each line. By clicking on the handles, it is possible to stretch the image with the handles on the sides or size the image by clicking on the corner handles and then dragging to extend or reduce both dimensions that define the corner. However, if the image is to remain an external file so as to limit the size of the PowerPoint presentation file, then the size at which the image will display is not as easily adjusted. As will be discussed in Chapter 9, the size of the image may be too large or too small as a result of how the image was digitally created. This applies to an image that was cut from another image in the "cropping" procedure described earlier. PhotoShop Elements will allow the adjustment of this image size, which can then be saved as a new image in a new size. Use the following steps to size the image:

- Open PhotoShop Elements.
- Open the image to be resized.
- Choose "Resize" from the "Image" pull-down menu.
- Select "Image Size" from the pop-up menu.
- Choose the size most appropriate (usually 72–96 dpi).
- Use "Save As" to save the image with a different name.

The technical meaning of these measurements is found in Chapter 9, but let it suffice at this point that the selection of these sizes most nearly matches the capability of a computer screen to display the image. Saving the image as a different name will allow the image to be saved and then hyperlinked to an e-portfolio as an appropriately sized image. This capacity of PhotoShop Elements will make the e-portfolio more viewer-friendly by preparing the images for easy viewing.

Masking Part of an Image: Filtering

When importing images into an e-portfolio file, the author may notice that the image shows an unintended feature. The feature may be a location name, address, or even a person. Even if you have permission to use the photograph, the imperative to protect anonymity is paramount. Any clues to the identity of the individuals should be protected to the greatest extent possible. If, for example, an evaluation is used as

an e-portfolio artifact and that evaluation is in a Word file, the name of the author should be deleted. A handwritten file, however, represents a special challenge because the signature, as a graphic, may not be easily deleted without making the document appear quite suspicious. In PhotoShop Elements, a tool allows you to mask the sensitive informa-tion by using a range of special effects. These range from completely blackening a region of the image to blurring part of the image by mak-ing it appear as if you are looking through patterned "bath-room window" glass. By blurring the name of the company on an image of a plant in which a manager experienced success, masking a signature on a handwritten note of appreciation, or blurring a face accidentally captured in a photograph, the e-portfolio author is meeting the promise of protecting identities.

Refer to the Student Resource CD for 2007 Microsoft and Mac screenshots

PhotoShop Elements makes filtering quite easy. Screenshot 8.2 shows an image with a region outlined by the lasso tool and the selection for distorting using the glass appearance. This results in a distortion similar to that when looking through "security glass" (see Screenshot 8.3).
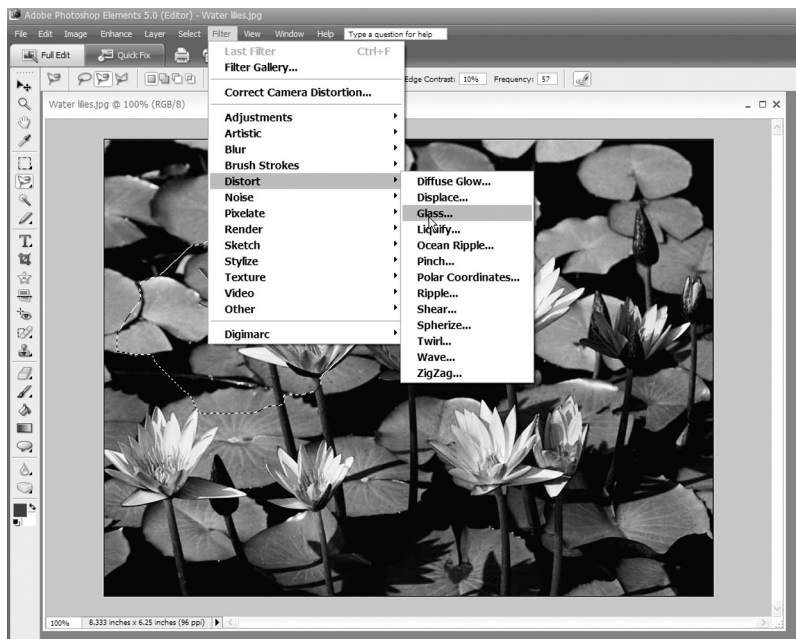
Follow the steps below to filter parts of an image:

- Open PhotoShop Elements.
- Open the image that includes a region to be filtered.
- Choose the "Lasso" to select an irregular shape or the rectangle to select a regular shape.
- Outline the region to be filtered with the tool chosen.
- Choose the "Filter" pull-down menu, and select the filter type from the window.
- Apply the filter by clicking on the selected filter type.

Filters range from effects that will blur parts of an image to transparent patterns that will create the appearance that the image has been painted with brushstrokes. Saving the image will also save the effect of the filter.


Adjusting for Brightness (Color, Contrast, and Brightness)

Poor quality of color, lack of contrast, and too much or too little brightness are some of the problems that could face an author as digital images are prepared for e-portfolio use. In film photography, such characteristics of images are difficult for a novice to correct, but the

digital dimension allows the portfolio author to adjust these character-istics more easily. An image that is taken indoors and too far away from the intended subject may result in an image too dark for use. A flash image taken too close to the subject may be overexposed, washing out color and detail from the subject. The lighting of a subject may cause the subject to appear the wrong color. This effect can be caused, for example, by sodium vapor lights that make a person appear more green than normal. Follow the steps below to correct any of these problems in digital images:

- Open PhotoShop Elements.
- Open the image that needs adjustment.
- Select "Enhance" from the pull-down menu.
- Choose automatic adjustment of contrast, color, or red-eye.
- Continue to the next step if Auto Levels does not correct the problem.
- Select "Enhance" from the pull-down menu.
- Select "Adjust Color" or "Adjust Smart Fix" as required.
- Use the sliding tools to apply changes.
- Saving the image will save the new settings.
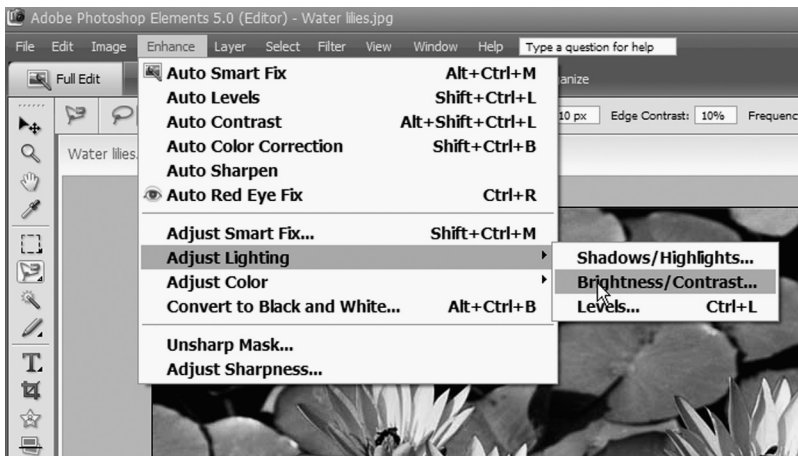
❖ EDITING SOUND

Programs do exist for editing sound files. In most situations, they can be easily located and downloaded as "shareware" from the World

Wide Web. Examples might include VideoStudio 7 (www.ulead.com/us/runme.htm), Goldwave (www.goldwave.com), or Electronic Musician (emusician.com/audio_editing_software). These programs permit a sound file to be played while the editing program tracks the sound on a display that looks something like a seismogram. Concurrently, a timer is active and displays on the screen.

The user can select a sound clip by either time alone or by looking at the sound display and cutting at an appropriate point in the music. Sound editing software also allows for cutting segments out of music.
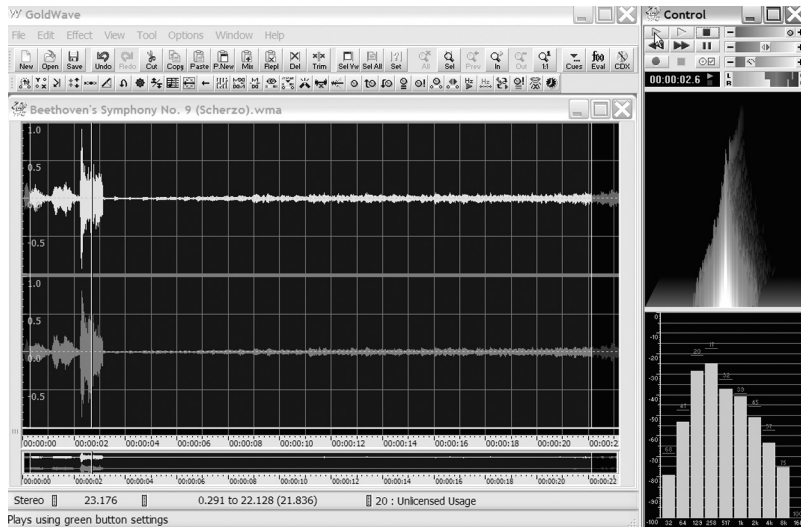
It is possible that a section of a song to be used in an e-portfolio has a stanza with questionable wording. Perhaps the use of expletives or images of violence or sexual content make the stanza undesirable. In that case, using a combination of timing and watching the display, a single stanza or any section of any length can be cut out of a sound file.

It is important to remember that PowerPoint can accept music clips in several of the most common formats, including ".wav" and ".mp3." It is important to recall, however, that there are limits to the legal use of audio clips that may be produced for commercial use. However, with the permission granted by the TEACH Act, it is possible to import music into these editing programs from CDs and then save it in a PowerPoint-friendly format. Most common sound-editing software packages are available as free downloads from the Web. The use of any of these software packages requires practice to generate the desired output. The differences among the packages are so great that including details other than those above would be counterproductive for this writing effort. The best way to become proficient in editing sound is to simply find a program and use it.
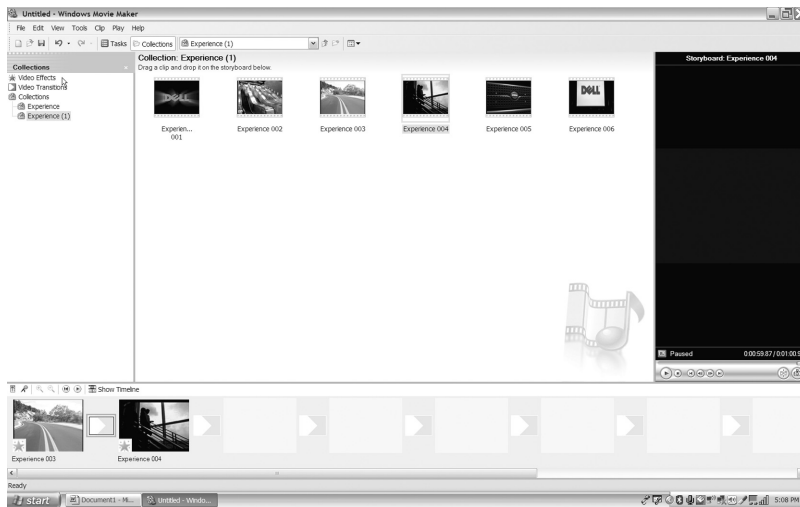
❖ EDITING VIDEO

Video editing has been a function reserved for large movie studios, where the art of cutting and splicing film is a highly valued skill. Although video editing still remains a technical skill that is an art, the technology of cutting and splicing is no longer reserved for the large studios. Film requires physical cuts and physical pasting, but digital video requires much simplified virtual cutting and virtual pasting. The programs to accomplish video editing have also become more common with programs such as iMovie for the Macintosh, Adobe Premiere for Windows-based computers, or Windows Movie Maker. With any video-editing program, you need to experiment with the program to become proficient. Importing video clips and editing are done in real time but often at the cost of a most valuable resource—time. Again, the programs that are available are numerous, and going into any level of detail would be beyond the scope of this work. However, some characteristics can be reviewed here.

Importing video requires the real-time playback of video. A USB connection may be sufficient for the review of digital photography, but digital video represents much more data than pictures one at a time.

USB technology is not sufficient for video work. Most new video cameras have a feature that allows for the wide bandwidth (i.e., very fast) digital import of video through "IEEE 1394" data exchange technology (also called "iLink" in Sony terminology and the more common "firewire" in Apple terminology). Connecting the camera to an "IEEE 1394" port on your computer or connecting the camera to play back through a digitizer is necessary to import video saved on tape. The function of a digitizer is to convert the standard video signal to a digital format that can be recognized by a computer. To make a movie, you must save a digital video clip or a series of clips and export it as a "movie." The steps to accomplish this are generally as follows:

- Connect the camera to the computer through a digitizer or firewire port.
- Start the video-editing software.
- Begin to play the video through the camera.
- Click on "Import Video" to start capturing a clip in the video-editing software.
- Click on "Import Video" again to stop the capture of a particular clip.
- Repeat using "Import Video" as a toggle to capture clips.
- Drag selected clips to the "video" or "movie bar" in the editing window.
- Drag clips to rearrange them in the order desired.
- Add special video effects as required and permitted by the software.
- Add voiceover or music as required and permitted by the software.
- "Export" the product as a movie, specifying the file as a .mov format.

Video editing allows the user to select segments from digital video to include in a final product. It is recommended that if video is to be cut into small segments, the video should be cut upon its initial capture for inclusion in the edited product or movie. The reason for this is that the clips can be included in the movie, their locations or order can subsequently be changed, or the clips can be deleted. These operations, however, are accomplished clip by clip. Thus, if there is a possibility that one answer in an interview will need to be deleted from a movie being made for an e-portfolio, then the interview should be saved as a series of video clips. This will allow appropriate video clips to be made as part of the movie, and the inappropriate clips can be deleted.

The display that is part of video editing is very similar to the display used for sound editing. A timer is shown, as is a pair of graphic displays of both audio and video segments included in the movie. Segments that make up the movie can be cut, moved, and deleted individually. It is possible to remove the video from one segment by using the video display while keeping the audio intact. It is possible to delete the audio from a video segment and then unite the video with the audio from another source. A variety of video effects is also standard with video-editing programs. You can fade to black at the end of one segment and then introduce the next segment by fade in from black. This would be an example of how only studios could do video editing. It is why studios were once the only source of technology able to produce a video where you would continue hearing an interview while cutting the video to a listener who is reacting to the video. Such manipulations of video are possible with the editing software that is available.

It bears repeating here that only enough audio or video should be included in an e-portfolio as necessary to make a point. Too much audio and video can be a distraction from the e-portfolio. Thus, it is recommended that these files be saved outside of the PowerPoint e-portfolio and that hyperlinks be established to allow the viewer to go to those clips only if they find a need to do so. In addition, the audio and video that might be included in an e-portfolio ought to be of high quality. Poor artifact files, or even poor audio or video, can work against a positive evaluation of the e-portfolio as an assessment tool. The purpose of the e-portfolio is defined by the e-portfolio's ability to
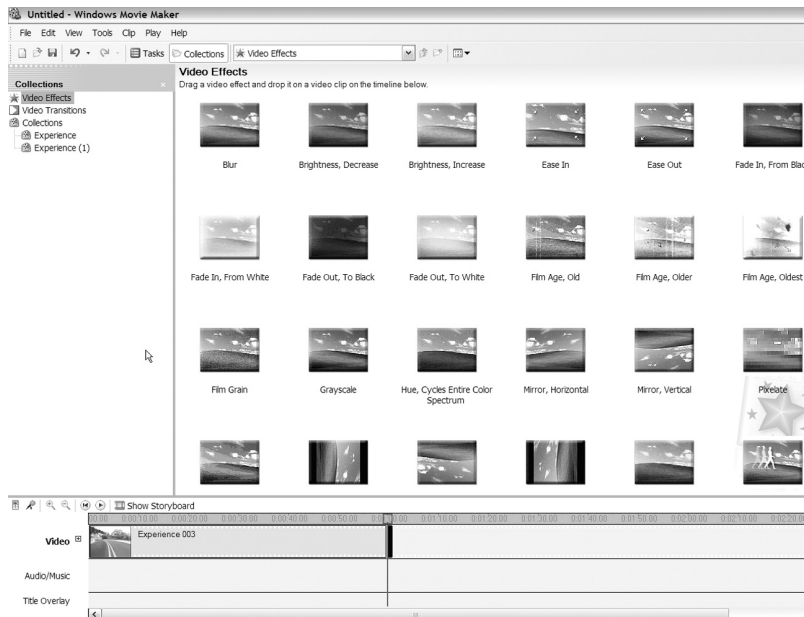
demonstrate that it meets the specified requirements or standards. In addition, audio and video files are relatively large in terms of the demand for memory. A 15-minute teaching segment, for example, will yield a digital video clip of about 1 gigabyte in size. Thus, to accommodate viewers who may not have systems with a large memory, you should not include audio or video directly in the PowerPoint presentation file that is to become an e-portfolio.

SUMMARY

In this chapter, the value of hyperlinking the e-portfolio is featured as the element that elevates the e-portfolio above that of its print equivalent. Hyperlinking between and among slides is augmented by hyperlinking to and among artifact files. It is hyperlinking that permits the e-portfolio author to exercise creativity to make the PowerPoint presentation a nonlinear experience. This permits a viewer to move directly to standards and artifacts of interest.

The chapter also addressed issues of artifact quality. Images can be edited using the Adobe PhotoShop Elements program. Although its

capabilities are far beyond those outlined in the chapter, the program can easily address the four common problems discussed in the text. Audio and video editing can be accomplished with widely available "shareware" downloaded from the Internet or software prepackaged with some computers. A general discussion of this process is presented, and users are encouraged to explore the specific requirements of the downloaded program by practicing with it. Although editing images, audio, and video is a skill, the programs now available make these operations possible, with an appropriate investment of time, for the novice e-portfolio author.

QUESTIONS TO GUIDE E-PORTFOLIO PREPARATION

1. Describe how a school superintendent, conducting interviews for a master classroom manager, might appreciate using a nonlinear e-portfolio rather than a linear portfolio.

2. What is the difference between internal and external hyperlinking in a nonlinear e-portfolio?

3. What are four very basic functions that can be accomplished through the use of Adobe's PhotoShop Elements editing application?

4. Name two applications that can be used to edit sound, and identify which of the options you identify are available to you in your computer lab or on your computer.

5. Name two video-editing applications and identify which of the options you identify are available to you in your computer lab or on your computer.

6. List four circumstances that may appear in digital photos or video that would require the use of editing applications.