Once they are aware of both the promises and pitfalls of e-folios, professors can make effective use of these collections of student work to enhance their students’ learning and facilitate their own process of responding to student work.

Assessing E-Folios in the On-Line Class

Mark Canada

“I love being a writer,” Peter De Vries said of his profession. “What I can’t stand is the paperwork” (Peter, 1977, p. 541). Many professors have had the same thought, especially when the first wave of student essays inundates their offices. The problem is worse for those more ambitious professors who have joined the movement toward portfolios. Now, in addition to periodic storms of drafts, they also must brace themselves for the hurricane of final portfolios that strike at semester’s end, swamp their offices, and linger on desks and spare chairs like floodwaters that refuse to abate. Even on-line professors, who may never exchange a single sheet of paper with their students, must cope with blizzards of e-mail messages, chatroom discussions, and postings on discussion forums.

In recent years, professors of both on-line and traditional classes have witnessed the introduction of electronic portfolios, or e-folios, an innovation that not only provides relief from paperwork but promises significant pedagogical benefits. E-folios are collections of student work stored in digital format—on a CD-ROM, for example, or in the form of an Internet site. In addition to carrying the same advantages that experts have associated with their traditional counterparts, such as a greater emphasis on revision, an improved relationship between professor and student, and emphasis on issues regarding audience (Elbow and Belanoff, 1991), e-folios extend these benefits and offer some of their own. E-folios, for example, have unique navigational advantages, are generally easier to maintain and share than their traditional counterpart, and encourage the development of additional communication skills.
To make the most of these benefits while minimizing the effects of a few pitfalls, professors interested in using e-folios must make educated decisions about format, implementation, and evaluation.

**Format**

In any assessment situation, professors must first decide exactly what they wish to evaluate, which depends on what they wish their students to learn. An advantage of traditional portfolios is that they expand the scope of material that students can use to demonstrate their growth and competence (Yancey, 1996). Instead of submitting three essays and taking a final exam, a student might turn in a portfolio that contains drafts, essays, photocopies of sources, and even photographs and audiotapes or videotapes. At the least, portfolios often include reflective essays in which students discuss their growth and refer to other materials in the portfolio.

E-folios extend this advantage. Whereas traditional portfolios require an elaborate system of appendixes and cross-references, e-folios allow students to integrate text and other elements, including photographs, illustrations, diagrams, charts, and audio and video recordings (Milone, 1995). For instance, a student's lab report might include a verbal description, a diagram, and a video recording (Niguidula, 1997). By using links judiciously, students can guide professors and other readers through their portfolios. Each of my students' portfolios, for example, includes an index page, a kind of cover page that features the student's name and e-mail address, as well as a brief profile and a table of contents featuring links to every component of the e-folio. Anyone visiting this e-folio can quickly and easily go directly to any component. Students also can use links to connect their reflective essays and captions to illustrative examples. A composition student reflecting on his or her progress in the area of using sources, for instance, might include links to examples of effective source use in several essays.

Once they have decided what they wish students to include in their e-folios, professors need to consider the format. CD-ROM has been a favorite format among many institutions, including Wright State University in Dayton, Ohio, and public schools in Indianapolis (Wiedmer, 1998). Wiedmer notes that this format offers significant advantages in the areas of price and ease of use, although burning several CDs in order to update information can be expensive and time-consuming. Some professors may choose to have students store their e-folios on hard drives or campus networks (Lankes, 1998). Professors can use software programs, such as Aurbach’s Grady Profile and Roger Wagner Publishing’s HyperStudio, to give their students templates for their e-folios (Lankes, 1998; Milone, 1995).

Yet another format is the on-line portfolio, which each student maintains in the form of his or her own World Wide Web site. To maintain this type of e-folio, students need to reserve space on a server, such as the one
maintained by Geocities (www.geocities.com), which allows anyone to publish as much as 15 megabytes of information for free in exchange for the right to post small advertisements on each Web page. Some professors may want to consider having students publish their pages on their own university’s server, although students may have to move these pages after they graduate. Students then use Web-authoring software to build their pages, finally publishing these pages to their server. Professors may want to require students to use a particular software package for building their pages so that they can offer technical assistance. I use Netscape Composer, which is already available on our university’s computers, is free to download at home, and is easy to use.

On-line efolios offer distinct advantages over traditional portfolios, as well as efolios stored on CD-ROMs, hard drives, or campus networks. Unlike those stored in three-ring binders or on CD-ROMs, on-line portfolios are easy and inexpensive to update, encouraging students to revise their work often and extensively. Students who maintain on-line portfolios may be more likely to view their work as a constant candidate for revision—as professional writers and designers do with a work in progress. Furthermore, no matter how many revisions they undergo, on-line efolios look perpetually polished.

On-line portfolios are also more accessible than other kinds of efolios, being available twenty-four hours a day to the professor, classmates, and indeed anyone else with access to the Internet. Although this accessibility might be problematic in cases where students’ postings are personal, it frees the professor from managing piles of notebooks or CD-ROMS and opens up several pedagogical opportunities, especially for professors of on-line courses. In one such course I taught, “Introduction to Literature,” I encouraged the students to read one another’s on-line portfolios to learn about the course material. By simulating class discussion, their efolios emphasized student-centered learning. Furthermore, since I assigned research essays on objective information, such as the history of Robin Hood, along with essays involving literary interpretation, these efolios also relieved some of the burden on me to prepare and transmit course material over the Internet. In a Web-enhanced composition course, I took this concept a step further and encouraged students to use one another’s on-line portfolios as sources for their own research articles. On-line efolios also enable professors and students to conduct draft workshops without ever meeting in the classroom. Finally, after the course ends, students can continue to maintain their portfolios on the Web, using them to demonstrate their abilities to graduate schools or potential employers.

In short, on-line efolios allow students to keep their best foot constantly forward, allowing them to revise continually and make clean, polished products available to millions of people all over the world. My students feel a unique sense of pride in their efolios, showing them off to friends and relatives.
Implementation

Having decided on a format for their students’ e-folios, professors need to develop a plan for implementing them in their courses. Like those who assign traditional portfolios, for example, these professors must decide how many components will go into their students’ e-folios, what types of components they will require or encourage—essays, drafts, photographs, recordings, and so on—how many revisions they will allow, what strategies they will use to help students develop their portfolios, and how much weight the entire portfolio will carry in students’ final course grades. When making these decisions, professors should consider some possibilities and pitfalls of e-folios.

In some respects, e-folios expand the possibilities for the kinds of materials that students can use to demonstrate their growth and competence. E-folios allow relatively easy integration of text and other elements, such as photographs and recordings, and professors may want to mandate or recommend certain components. However, e-folios are not entirely conducive to some types of artifacts, such as handwritten notes and photocopies of sources. If professors wish to view such materials, they can require students to convert them into a digital format by scanning them. Because such a process can be tedious, professors might simply require students to keep hard copies and supply them on request. If the student is not local, the professor must leave time for such material to travel through the mail.

Unlike traditional portfolios, e-folios call for special equipment (Niguidula, 1997; Milone, 1995). Making sure that students have access to this equipment, as well as the skills to use it, can be a challenge in on-line courses, where students may be logging in from very different locales. Thus, professors may want to require only components that students can produce with an average home computer—verbal essays, links to Internet sites, and perhaps illustrations—though they still may accept other types of material, such as photographs and recordings, from students who have access to the necessary hardware and software.

A greater challenge is ensuring that students have the skills they need to assemble their on-line portfolios (Purvis, 1996). I have tried a number of strategies to help students acquire these skills. For example, I post detailed instructions on my Web site and link them to the unit plans for the course. In my Web-enhanced courses, I devote at least one class session to showing students how to reserve Web space, build a Web page, and publish it. In on-line courses, I cover this material in optional training sessions. Some students in these courses have attended these sessions, and others have simply used my instructions to train themselves. I also provide students with one-on-one assistance by e-mail, telephone, and face-to-face conferences.

Although the process of building and maintaining an on-line e-folio is relatively simple and can be learned in about an hour, many students inevitably struggle at the outset. Merely typing “www” instead of “ftp” can
keep them from publishing their work, and because the concepts of links and subdirectories may be alien to them, many students cannot do their own troubleshooting at first. For this reason, professors who assign efolios should be prepared to spend several hours troubleshooting with students during the first few weeks of a course. To provide an incentive for students to master the necessary skills early, professors may want to set an early deadline for the first component of the portfolio. In a typical course, I require students to publish their index page at the end of the first week of classes.

Assessment

When it comes to assessment, efolios resemble their traditional counterparts. Professors may decide to evaluate only the final portfolio or to grade individual components over the course of the semester and then assign a separate grade to the final portfolio. Furthermore, they may elect to assign points to various assignments or simply assess the entire portfolio holistically. In any case, professors will want to use a rubric that refers to standard criteria, such as accuracy and creativity, and to share this rubric with students at the beginning of the semester. Because of the nature of this medium, they may also want to take into consideration a few other aspects, such as appearance and ease of navigation. For example, my evaluation criteria state that projects should be accurate, clear, and readable but also functional and attractive. If professors include such considerations in their criteria, they should provide not only technical assistance with setting up links and changing colors, but also guidance on general principles of graphic design. In my composition courses, I include a unit on graphic communication, in which I cover font selection, focal points, and related concepts.

Students who are creating efolios, then, have to demonstrate additional skills on top of those required for traditional essays and portfolios. Professors can encourage students to view such “extra” requirements not as burdens but as opportunities. As on-line communication is becoming the norm, links and graphic elements are important communication tools in their own right, and knowing how to use them effectively is akin to knowing how to organize a paragraph or paraphrase a source.

Professors accustomed to circling words and writing in margins will need to devise new methods for responding to their students’ efolios. Of course, they still can write general comments, either saving them directly on the hard drive with the efolio itself or sending them to the student as an e-mail message. Marking and commenting on specific passages is only slightly more complicated. If the original essay was saved as a Microsoft Word document, for example, the professor can type comments in a different typeface in the text itself (Howard, 1996) or use the convenient “insert comment” function to highlight passages and respond to them. If students
are publishing on-line portfolios, the professor may download each essay, type comments directly onto it, save the essay, and return it to the student on a diskette or as an e-mail attachment.

With some ingenuity and preparation, professors can use the electronic environment to facilitate responding to students’ work. Howard (1996) describes an “electronic boilerplate” she uses to respond to a particular common problem she encounters in student portfolios. For my classes, I have created an electronic evaluation form with links to Web pages I have created on core concepts, such as research, drafting, and revision. If the portfolio shows problems in one of these areas, I list it under “Areas of Improvement” and e-mail the form to the student as an attachment. The student then can click on the link to find guidance for revising the portfolio.

I evaluate my students’ on-line portfolios at least twice during the semester. First, in the weeks before midterm, I visit each student’s on-line portfolio, cut the major contents, and paste them onto an evaluation form that I have created. At the top of this form, I type some general comments

**Exhibit 8.1. Evaluation Criteria for E-Folios**

<table>
<thead>
<tr>
<th>Content</th>
<th>The portfolio must contain all the assignments described on the syllabus. Each individual project in the portfolio should thoroughly and insightfully address its subject with accurate, credible, timely, and relevant information. Argumentative essays should state clear, substantive, contestable, and precise claims early and support these claims with appropriate evidence.</th>
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<tbody>
<tr>
<td>Clarity</td>
<td>Each written project in the portfolio should present information in a clear, logical fashion. In general, each paragraph in the written projects generally should begin with a precise topic sentence, followed by clear, well-organized sentences that support the topic sentence. Transitional words and phrases should effectively guide the audience through the information.</td>
</tr>
<tr>
<td>Style</td>
<td>All work should engage the audience with lively, concise writing and should generally lack lapses in tone, register, punctuation, mechanics, spelling, word choice, and grammar. Each project should effectively incorporate source material with proper use of attribution, paraphrases, and quotations. Longer projects should begin with engaging introductions and include satisfying conclusions. Written projects should be functional and attractive, conforming to all appropriate professional standards. In particular, all parenthetical citations and lists of works cited in the written projects should conform to MLA [Modern Language Association] style.</td>
</tr>
<tr>
<td>Integrity</td>
<td>Each project must be your own work. That is, except for properly cited quotations, every sentence and phrase must be in your own words. All interpretations, except for those properly cited, also must be your own. If you turn in someone else’s work, use a source’s exact words without placing these words in quotation marks, or use an interpretation you found in a source without giving credit to the source, you are guilty of plagiarism and may fail this course. You must be prepared to prove that you have done all your own work by showing or mailing me your sources and discussing the details of your project with me in conference, either in person or over the telephone.</td>
</tr>
</tbody>
</table>
in the form of a letter. At the bottom, where I have pasted the student’s essays, I insert comments, questions, and suggestions. This evaluation form also includes notes on areas for improvement, each linked to a Web site with helpful hints, and a tentative grade that reflects the quality of the portfolio at that point. Students then have the rest of the semester to revise their portfolios, using my evaluation forms to revise their existing work and construct strong future work. Near the end of the semester, I evaluate the entire portfolio again, now in its finished form, and assign a final grade. On each occasion, I use a holistic approach, assigning a grade that reflects the student’s overall mastery of course content.

Exhibit 8.1 sets out the criteria I use in my Web-enhanced courses. Using criteria such as these, I evaluate each student’s portfolio holistically and assign a grade that reflects his or her overall mastery of course content.

Conclusion

Professors striving to provide students with the best on-line educational experiences can capitalize on the possibilities of the technology and look for ways to adapt proven strategies from traditional classrooms. Portfolios may provide students with extra incentives to revise their work, increase their sense of ownership, and foster their relationships with their professors. E-folios provide and extend these benefits, encouraging on-line students to revise even more often, giving them an even greater sense of pride, facilitating draft workshops and other forms of interchange, and saving on-line professors a lot of paperwork in the process.

References


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