Using ePortfolios
For Engaged Learning

A Handbook for www.ePortfolio.org

By Robert McCloud

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Introduction

This manual will explore ways faculty and administrators might incorporate ePortfolio into the assessment of student work, courses, programs, departments, and institutions. As each college and university has its own needs and resources, the manual provides a variety of approaches and best practices for institutions to adopt or adapt.

Although summative assessment flows from formative assessment and many institutions use a combination of the two approaches, for clarity and ease of use this manual is divided into two sections. Part I of the manual addresses formative assessment, which focuses on process, guidance, and feedback. This section includes a review of ways to introduce ePortfolio to students and encourage its use. Examples of portfolio assignments, methods of selection, organization, and reflection, and consideration of audience, grading, deadlines, scheduling, and rubrics also are included in this section.

Part II addresses summative assessment, which focuses on evaluation, measurement, and judgment and can range from the evaluation of individuals to projects that encompass entire institutions. Summative assessment may be used internally for grading and institutional planning or as part of the reporting process to outside constituencies such as accreditation organizations.

The appendix provides links to assessment rubrics and portfolio assignments.

The Connecticut Distance Learning Consortium’s ePortfolio is divided into three sections: advising, career counseling, and portfolios. Students may create any number of portfolios within the ePortfolio for different purposes and audiences. All information in the portfolios remains private until the student creates a guest view and e-mails that guest an invitation to view the portfolio. Students must set a goal for each portfolio. To encourage reflection and planning, text boxes for this purpose are included in each portfolio. Text files, video clips, audio files, and graphics may be uploaded to ePortfolio. For detailed instructions on the technical aspects of ePortfolio management, consult the Connecticut Distance Learning Consortium’s manual at: [http://eportfolio.org](http://eportfolio.org). If you are not familiar with ePortfolio, we recommend that you read the technical manual first. CTDL also provides separate manuals on using the ePortfolio for career counseling, advising, and first-year programs as well as a handbook on using media technology in ePortfolio.
Part I: Formative Assessment

Philosophy and Reflection

On the evening of my college graduation I sat in a rocking chair on a lakeside porch just below Tanglewood in Lenox, Massachusetts. In the other rocking chair was a gentleman on his way back to his 35th reunion at Dartmouth. Since graduation days are filled with advice, he must have thought one more piece was necessary. “Bob,” he said, “Do you know what is the greatest thing about graduating from college?” I thought for a moment, then replied, “No I don’t.” “Then I’ll tell you. The greatest thing about graduating from college is that you realize you have wasted four years.”

At the time I wasn’t too thrilled about those particular words of wisdom. However, in future years they often returned to me until I finally figured out what the gentleman meant: We all seem to rush through college without ever stopping to reflect.

Reflection is one of most valuable aspects of ePortfolios. They force students to reflect because they will be assessed on precisely that activity. But in all likelihood this process will not come naturally. Throughout the formative assessment process, it will be up to the professor to guide and provide ongoing feedback. Historically many teachers felt their students learned best from the formative assessment process. From the days of the Socratic dialog, students have worked toward clear thinking through probing, encouraging feedback from their professors. As President of Williams College from 1839-72, Mark Hopkins pioneered the concept of student-centered learning. One of his former students, U.S. President James A Garfield, commented, “The ideal college is Mark Hopkins on one end of the log and a student on the other.” (About Williams, n.d., para. 12)

Students construct meaning by reflecting. They must consider which artifacts will make their way into any particular portfolio and examine how they have changed since the artifact was created. They must ask what they learned from creating the work and consider how they might have completed it differently. Asking (and answering) such questions will help the student grow. Through the growth process, meaning will be created.

Reflection will be one of the most time consuming and difficult assessment tasks, but there are ways you can make it smoother and more rewarding. The first is to tell students that reflection does not mean telling the teacher what she wants to hear. Even professors have trouble reflecting. Tell this to your students! Then give them some questions that guide and encourage the process. Here are a few:

- Did any other part of your education help you do this assignment?
- Describe the planning process you used. How could it be improved for the next assignment?
- Did you learn anything new about project management?
- Did you like or dislike this particular assignment? Why?
- Was the assignment explained to you in enough detail?
- How does this assignment compare to others in this course?
- Did you use the “scrap and rework” technique? Did it help?
When assessing reflection, both student and teacher should be cognizant of this question: How does this ePortfolio look different because of the reflection process?

Explain to your students that, unless they take time to reflect on their experience, its value for personal growth will be lost. Here is opportunity to share a personal story or two about learning from your own experiences through reflection.

Be certain to emphasize that assessment of reflection is not a judgment of the student. Explain that you are trying to help the student learn a process. As an example of how powerful the reflection process can be, you might refer your students to http://www.storycenter.org/understanding.html. Here they will find some wonderful examples of other students reflecting on their lives. The site might even inspire your students to create their own digital stories.

A self-interview will force the reflection process. Typically the art of reflection grows as we mature. For most of us this is a pretty slow, sometimes painful, process.

To help students get an early start, point out that reflection can really be a dialogue with one’s self. It might help, at this point, to show some classic dialogs and/or interviews. One idea would be to assign a simple Platonic dialogue (the Meno). On the other end of the spectrum would be a more modern interview. Dick Cavett’s classic television interview with Janis Joplin would be a good example here. Somewhere in between lies the granddaddy of all self interviews: St. Augustine’s Confessions. A section involving his ribald youth would demonstrate how a saint used reflection to grow as a human being.

In the assignment have your students invent a character who will be responsible for asking the questions. The student herself provides the answers. Set it up in dialogue form. Provide some sample questions:

- Why did you come to college?
- Tell me about your selection process for this particular college?
- What was the biggest surprise of your first year?
- How have you changed since entering college?
- What was your best (worst) course?
- What is the achievement of which you are most proud?
- Is there anything you would change if you could go back to the beginning of your first year?
- How do you plan to improve your work next semester?

These questions should be geared toward growth. All of us are works in process. The difference between student and instructor is that the process speed is probably much faster in the student’s case. By assigning a self-interview and developing the necessary skills to complete this assignment you give the student a chance to take a snapshot of that speedy process.
Student-Centered Learning

While the professor will guide, it is ultimately up to the student to do the hard reflective work. Let students know that ePortfolios involve a shift from course-centered learning to student-centered learning. Emphasize to your students the meaning of “student-centered.” Explain how the ePortfolio experience places them at the center of learning and gives them control over this process. Skillful ePortfolio development presents academic experiences as a learning curve that leads to fulfillment of professional goals through a controlled, reflective academic experience.

When addressing the student as ePortfolio creator, you do need to be specific about how this works. Being student-centered is not an unmitigated benefit. In fact it carries with it the burden of responsibility. Let your students know that the process takes time, and that an important part of the grading process is how much actual reflection and improvement takes place during that time.

Introducing ePortfolio to Students

Unless there is broad-based institutional support for ePortfolios, it will be a very difficult initiative to sustain. Our best advice is to look around for curricular places where this concept can be introduced: first-year seminar; orientation; service learning courses; introductory English composition. Once such support has been established, it will be far easier to use ePortfolios for assessment. Students will be accustomed to the technology and instructors won’t feel as if they are reinventing the wheel for each class.

Instructors who use ePortfolio in the absence of an institutional assessment plan, must put even greater emphasis on providing detailed introductions for students. When introducing ePortfolios, be sure to emphasize that it is an integral part of your course, not an add-on. If you are going to use the ePortfolio for assessment, the students who will be assessed must use it continuously. To make your ePortfolio use a success, place it prominently in your original syllabus, setting specific times for class discussion and due dates for ePortfolio progress reporting.

Also stress that students will be learning by doing: they are not expected to understand the ePortfolio process at the beginning. This is precisely why the ePortfolio experience should be introduced right away. If you discuss it during your first class, you can get the questions and complaints out in the open immediately and move on toward the actual process. Depending on your discipline, you might want to consult with a colleague who teaches writing. Some good practical tips will almost certainly ease early student anxiety.

ePortfolio construction may be an unwelcome task for students. It is new. It requires reflection. It asks for constant scrap and rework. And it begs for procrastination. They also may feel that using ePortfolios for assessment is unfair. They may consider the ePortfolio to be fluff—another digital age add-on that is really extra work disguised as a learning benefit.
When you announce that ePortfolio will be part of their final grade, be ready for confusion, questioning, and perhaps some anger.

One way to diffuse the resistance is to stress values inherent in an intrinsic, scrap and rework process. The example I use is from American playwright George Kaufman’s autobiography. Kaufman, author of “Front Page,” “The Royal Family,” “Animal Crackers,” “The Man Who Came to Dinner,” and “You Can't Take It with You.” Kaufman was a terrible insomniac. At around 3 a.m., when he would regularly wake up, he would go to his desk and begin retyping (not rewriting) the scene he had written earlier in the day (Hart and Kaufman, 1971) The simple process of re-keyboarding caused the excess words to disappear. As a result, Kaufman became know as one of the clearest writers on the American stage. Simple retyping can be a good way of starting the scrap and rework process.

Another approach is to collect practical examples of the benefits of electronic portfolios. One of my students resolved to get a top job in computer programming. He researched the programming needs of his target companies, IBM and AT&T, and created an ePortfolio that highlighted his abilities in those areas. The result was employment offers from both corporations. He accepted the one from AT&T at a starting salary in excess of $100,000.

Just this spring a student from Boston received a summer job offer with an investment company because of a successful interview. When the interviewer asked if he could create an Excel spreadsheet, the student referred him to his ePortfolio, where he had uploaded a Excel assignment from class.

Another student, who worked in New York’s financial district during summer break, had a colleague make a digital movie of him performing his daily duties. This will become part of his ePortfolio to demonstrate practical experience to a future full-time employer.

Students who want to be teachers can post lessons plans and digital movies of their student teaching. There is nothing like watching a prospective teacher in action to stir the interest of the hiring school district. At the University of California, Riverside, http://education.ucr.edu/breilly/portfoliosamples/, future teachers combine Adobe pdf files with Quicktime movies to demonstrate their classroom competence. Although the Connecticut Department of Education has yet to require electronic portfolios for teacher certification, that does not mean that ePortfolios are not helpful. As the Cal Riverside examples show, an ePortfolio is a very practical way to demonstrate classroom competence.

Make a habit of collecting these stories and asking your students whether you can share their ePortfolios with other students. Once practical value is established, the entire ePortfolio process becomes smoother.
Lead By Example

The most important example is your own ePortfolio. You should begin building it well before using the ePortfolio software in class. Be open in sharing your experiences, including difficulties.

As I speak with students about exactly what makes a good teacher, two of the qualities mentioned are organization and sharing personal data in an appropriate fashion. ePortfolios offer excellent opportunities for both. By displaying your own carefully crafted ePortfolio you show that you care enough to use the software and that you have prepared in advance for its introduction.

I usually share a personal example to introduce ePortfolios. After the first two years of graduate school I could not decide whether I wanted to become a professor or a writer. So I took a year off to go to New York and seek fulfillment as a writer. My first job interview was at the *New York Post*. I walked in, spiffy in a new suit and a freshly-minted resume. The editor reached out, took my resume, and promptly dropped in his garbage can. He said “I don’t give a s--- about your fancy education. Show me some samples so I can see if you can put one word after another.”

This is the type of moment for ePortfolio. If a student can direct an interviewer to an ePortfolio that displays examples of her work, any interview stands a fair chance of being productive. The point of the story is clear: if you expect students to buy into an ePortfolio’s usefulness, be willing to show your own work and share personal experience demonstrating that usefulness. The instructor needs to believe in the product and use it regularly.

If you are using ePortfolios in general education courses, this is an excellent opportunity to talk about job skills valued by employers and graduate schools. For example, the ability to communicate well is highly prized by all corporations. This could be demonstrated in several ways: PowerPoint presentation; digital movie of speech; or a well-written paper. In addition, by organizing the ePortfolio presentation itself, a student demonstrates her ability to present information and documentation in a coherent way.

Helping Students Construct Portfolios

Define exactly what is involved in building an ePortfolio. Tell your students which items you expect them to include, which items will add to their ePortfolio quality, and where to find the tools necessary to build these items. For example, check with your school’s audio visual department to learn its policy for loaning equipment to students. Then tell the students about this policy and encourage them to take advantage of the opportunity.
Collecting Content

Students sometimes underestimate both the value of their work and the actual amount of intellectual experience accumulated during their academic and personal careers. Before building an ePortfolio they should make a list of all possible artifacts. The old maxim “When in doubt, throw it out,” doesn’t necessarily apply in the digital world. Storage is a cheap commodity. You should probably have students keep a particular file until they are absolutely sure it will have no future use. Since reflection is an important part of ePortfolio work, you should be especially careful to recommend saving unsuccessful assignments. Looking at them can be a valuable growth experience.

Digital artifacts might be as simple as a Microsoft Word document or as complex as a Flash movie with soundtrack and buttons for user playback. As the instructor, it is up to you to make suggestions and open the door to student thought. You might also make requirements, but that would depend on the individual course and what talents and experiences the students bring to that course. When formatively assessing artifact use, you focus on selection and reflection, not necessarily quality. By not focusing on quality you emphasize that the student should use the ePortfolio process to try new learning experiences. For example, let the student know that he does not need to be a media studies major in order to make an acceptable digital movie about his summer job.

Scrap and Rework: Reflection is an acquired habit. If we are going to assess student reflection quality, we really should demonstrate what goes into the process.

Probably a good place to begin is in the saving process. As soon as you introduce ePortfolios, show your students how to upload documents. Having done this, they can go back to those documents to revise or review them.

From an assessment point of view, the valuable work takes place in reviewing. Teach your students to view and think about what they have created. You should put regular review points in your syllabus. At two-week intervals, for example, each student should be required to have reviewed at least one ePortfolio artifact. Changes to and comments on this artifact should be submitted to the professor. What did it mean to them when they originally focused on this task? How useful are their comments as they go back and look at earlier work?

Content

Content consists of a combination of gathering and selection. In your comments emphasize why ePortfolios are part of the curriculum. That is, they exist so that a student can demonstrate how his abilities have grown and matured over time. Look for content that represents successful student experiences. Then encourage your students to reflect on what made this particular experience worthwhile, and how they learned from the experience. Remember that you are not assessing the artifact itself. Rather you are interested in how the student views that artifact and why she selected it. A student who collects many “A” papers but fails to reflect on those papers would receive a low ePortfolio grade.
As part of the reflection assessment, help your student set learning goals for future papers. Your assessment should encourage critical thinking in the selection process. You might also ask the student how each piece selected ties into one of her goals. Look for evidence that the student is becoming more articulate as the semester progresses. There is a definite advantage to regular checkpoints: You can track and encourage development of your student as an articulate thinker. On one hand, this will result in a more successful ePortfolio. On the other hand, it will actually help the student become stronger academically because of the ePortfolio process itself.

To help the student in content definition and selection try giving a writing assignment as an introduction to the ePortfolio concept. After demonstrating sample portfolios and showing where to find the software, ask your students to write about how they think ePortfolios can be used productively. Notice here that you are actually asking them to reflect on something that they have never used. You can then establish a baseline for their attitudes toward an idea that almost certainly has not been presented in the past. In your assessment of this initial paper, focus on their openness to new experiences as well as the potential uses they have identified.

**Audience Appropriateness**

Tailoring a presentation to meet a specific purpose will almost certainly be a new skill for your students. Here you are really considering two skills: collection and selection. This is a good place to introduce goals and their place in the CTDLC ePortfolio software.

Exercises like this will also demonstrate why specific ePortfolios are tied into goals. At first students will probably see this as a software restriction. Before they can create a new ePortfolio, they must consider a goal. However, through practice it becomes apparent that, by thinking of the goal in advance, later selection and building can be more easily related to this goal. This type of exercise also allows students to develop their communication skills.

**Craftsmanship**

Earlier we mentioned scrap and rework. The scrap and rework process is an essential part of the craft of building the most effective individual ePortfolios possible. Select. Reflect. Revise. Craft. For students this is not an intuitive process. Unfortunately, too many of our students regard a first draft as a finished piece of work. The crafting process actually provides the ePortfolio process with a beautiful opportunity for teaching. Through formative assessment the teacher can provide feedback and help as the student works her way through crafting. Each instructor will come up with his own ways for nurturing this crafting process. Here are brief suggestions for beginning points.

**Assessment Opportunity: Map a Strategy**

When registering for courses, students all too often approach the task with a haphazard attitude. There are major department requirements. There are university general studies requirements. Typically these two categories are treated as checklist tasks one has to satisfy. Since the checklist must be completed before graduation, each student, out of necessity, has the competency to meet these minimum requirements.
They will benefit greatly from developing another competency: mapping a strategy to meet their own or an externally defined learning objective. By requiring students to strategize, and telling them it is part of their final assessment, you require them to think both reflectively and proactively.

For example, there is typically some choice within university core requirements. What should be considered when making that choice? Encourage the student to answer that question through a perusal of the course catalog. Students can define an educational goal, then see which courses, in addition to those in their major, will help them meet that goal.

A computer science major, for instance, might want to take a philosophy course in logic, a class in the physics department, and an English course in technical writing. The logic course helps in program development. The physics course is good for an understanding of topics such as storage and speed. The technical writing course develops expressive powers beneficial in a career path up the executive ladder.

Although none of these individual courses is required, the reflective student chooses them as part of his overall career strategizing. In addition, their successful completion brings an added dimension to education. Require the students to go through this process. Provide feedback and grade them on the final product and the quality of reflection that brings them to that point.

**Assessment Opportunity: Evidences of Learning**

This will enable you to assess both collection and reflection. A hallmark of an educated person is the ability to document conclusions and statements. Education is a continuum. As each student progresses, he learns more about the difference between the unwarranted assertion and one that is supported by researched documentation.

Building ePortfolios provides valuable practice. By its very nature the process draws upon the student’s own learning experience as documentation source. In this case he uses his artifact collection to provide evidence of skill development and knowledge attained. The collection of, and reflection upon, such evidences, offers a solid assessment opportunity. What was the basis for inclusion of this particular artifact? How did the student grow through the development process? How does he build on the experience? What would he do differently in the future? Questions such as these guide the student and provide a detailed, fair assessment framework.

**Establishing Expectations**

**Technical Expectations**

Tell your students that a certain amount of technical skill will be necessary. Let them know that help is available. (Before making this offer you should either have that help available from your own knowledge or some backup capability provided by your institution.) You might also refer your students to the CTDLC Help Desk, [http://www.ctdlc.org/Help/index.html](http://www.ctdlc.org/Help/index.html). There they will find the option of either e-mailing for assistance or using a toll-free number to speak with a staff member. One cautionary note: students tend to use the Help Desk only after you have already introduced the software to them and demonstrated where they can go for help on their own.
**Schedules and Deadlines**

Students should begin their ePortfolio work immediately. This is not the type of assignment that should be given out one or two weeks before it is due. ePortfolios are a new idea. They need time to sink in. Students need time to make mistakes. If you are going to have any possibility for a fair summative assessment grade at the course conclusion, you want to have time for regular assistance and regular chances to turn failures into successes.

At this point you should be prepared to help your students develop time management skills. Set regular time intervals (two weeks is a good interval to begin with) when you will be checking on their work and be available for consultations. Be sure to log their progress. It is probably a good idea to actually issue a grade at each specified interval. Let them know that the important criterion is continuous progress. The ePortfolio is one valuable tool for teaching that the pressurized rush to meet a deadline is not the most heuristic way to achieve quality, thoughtful outcomes.

**Ongoing Feedback: Key to the Formative Assessment Process**

Education is a process and any assessment needs to take that into account. In fact, the very idea of an ePortfolio is to help students understand both process and reflection on their lives as works in process. So the ePortfolio will be a semester-long assignment. (In actuality, of course, program or general education assessment will last throughout a student’s career at a particular institution. However, almost all course assessment is limited to a semester time frame.)

By dividing up the assessment process into manageable units, you will provide ongoing, formative guidance. For best results, provide feedback every two or three weeks. Although it is certainly up to the individual professor, in most cases these periodic assessments will be restricted to comments. Students will normally want to know what percentage of the final grade is dependent on ePortfolio work. The higher this percentage, the more you will want to consider actually giving interval letter grades. Whether you give letter grades on progress not, your ongoing comments are necessary.

Let the students know that presentation counts. Here I sometimes use the (now tired) metaphor about the sizzle being as important as the steak. This is risky because it might seem as if you are putting marketing before substance. However, it is both fair and practical to advise students that how they look digitally is increasingly important in a competitive marketplace.
Part II Summative Assessment

In summative assessment we look at the entire body of work of a student, group of students, program or institution. The work is evaluated, measured, and commented upon. Several summative assessment characteristics are generally accepted. The first is that summative results should be understood in a fashion that is clear to a person not associated with the particular school. Thus, we would want our summative work to be clear to accreditation bodies, potential employers and anyone else interested in judging a student’s performance in relation to those at other educational institutions. In our own institutions, summative assessment is typically used to determine both whether the student is fit for further study in this area and also to rank him against his peers. In the summative stage we look at the ePortfolio as exemplifying completed work. We are no longer nurturing. We are assessing.

Assessment takes place throughout the educational process. Professors assess students. Students assess their professors at the end of each course. Department chairs assess professors. Deans assess department chairs. And so it goes up the chain of academic command. Many institutions will choose to use a combination of formative and summative assessment and the ePortfolio can accommodate both approaches. For a good example of this combination look at the Junior Writing portfolio program at Washington State University, http://www.wsu.edu/~jrpf/. Students there are encouraged to collect writing samples throughout their WSU career. As students select these samples for their portfolios, they must complete a portfolio cover sheet signed by the instructors who assigned the work. At this point the instructor provides formative assessment by commenting on the appropriateness of the student’s choice of work and offering suggestions for improvement. Then the process proceeds to the summative stage. Criteria are clearly outlined on this site. By involving professors before moving on to summative assessment, Washington State does a good job of combining the two overall assessment models. As part of the site, Washington State includes a notes page documenting a retreat where professors spent time together developing ways to provide the best formative feedback to their students. Such institutional commitment is needed for ePortfolio implementation.
The Critical Thinking Rubric

1) Identifies and summarizes the problem/question at issue (and/or the source’s position).

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<tbody>
<tr>
<td>Does not identify and summarize the problem, is confused or identifies a different and inappropriate problem.</td>
<td>Identifies the main problem and subsidiary, embedded, or implicit aspects of the problem, and identifies them clearly, addressing their relationships to each other.</td>
</tr>
<tr>
<td>Does not identify or is confused by the issue, or represents the issue inaccurately.</td>
<td>Identifies not only the basics of the issue, but recognizes nuances of the issue.</td>
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2) Identifies and presents the student's own perspective and position as it is important to the analysis of the issue.

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<th>Scant</th>
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<tr>
<td>Addresses a single source or view of the argument and fails to clarify the established or presented position relative to one’s own. Fails to establish other critical distinctions.</td>
<td>Identifies, appropriately, one’s own position on the issue, drawing support from experience, and information not available from assigned sources.</td>
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3) Identifies and considers other salient perspectives and positions that are important to the analysis of the issue.

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<th>Scant</th>
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<tr>
<td>Deals only with a single perspective and fails to discuss other possible perspectives, especially those salient to the issue.</td>
<td>Addresses perspectives noted previously, and additional diverse perspectives drawn from outside information.</td>
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4) Identifies and assesses the key assumptions.

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<th>Scant</th>
<th>Substantially Developed</th>
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</thead>
<tbody>
<tr>
<td>Does not surface the assumptions</td>
<td>Identifies and questions the validity of the assumptions and</td>
</tr>
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Summative Assessment of Individual Students

Students naturally want to know the basis for assessment. By being very specific at the outset, you can ease their fears of the unknown and provide a roadmap for successful ePortfolio use. Even if you follow the best introduction practices to the letter, students will still want to know how such an unfamiliar project will be graded.

You might want to consider rubrics. Appendix A lists and discusses some excellent rubric source material. Generally, rubric use benefits both teacher and student by providing a written, clearly identified set of assessment standards. However, rubrics can also take away creativity by making students believe they should limit their efforts to those areas and competencies defined by the rubric. If you follow the blueprint for an A, then you should receive it.

On the one hand, you might say the rubric is too confining: Why do more; why be adventurous if it is not going to be recognized? Do the undeniable benefits of clarity stifle creativity? In general I think the answer to this question is “no.” A grading rubric actually might help creativity by clearly explaining course learning goals to students. You might also include such categories as creativity, independent thought, breadth of treatment, and enthusiasm as valid criteria for grading. Used in this way the rubric could actually broaden a student’s course view.

If you are going to use the rubric model, be sure to go into careful, full detail. Your rubric should be a grid with criteria on the vertical axis and grading point amounts on the horizontal. Before using a rubric, you should field test it with some student volunteers. In selecting your volunteers be careful to either (1) pay them and select them through open solicitation or (2) choose students other than your own to ensure impartiality. Almost every teacher has had the experience of giving out an assignment that seemed clear as a bell when designed, yet confused the students. This can be even more the case with a scoring rubric. Because a student will perceive that his grade depends on following this guide carefully, field-testing is absolutely necessary.

Course Assessment: Documenting, Mentoring, Engaged Learning, and Outcomes

Much of teaching is about mentoring. At the beginning of this manual we talked about Mark Hopkins’ ideal of the teacher at one end of the log with the student sitting on the other. Today our logs are mostly digital, but the intimacy is still there. When you e-mail notes to your student, you are in fact creating a one-on-one world. Further, it is a world that is eminently available for documentation. Many e-mail editors allow you to use the “Reply” function to show when an e-mail was written and to whom it was sent. Take advantage of this by tracking your online interactions with students and preserving a series of these exchanges in your course assessment ePortfolio.

Engaged Learning

ePortfolio course use helps students to become more engaged in the learning process. As another of our early 21st century core pedagogical values, engaged learning is generally thought of as a technique for increased student involvement through active and collaborative exercises. Engaged learning seems to have almost been invented as a challenge that ePortfolios meet. Your ePortfolio can show several different ways in which you engage and collaborate with students.
• Provide evidence of variety. Students might use text files, videos, sound, graphics, Instant Messaging, databases, or dynamic spreadsheets to create their own ways of expressing and explaining knowledge.
• Exhibit non-linear thinking skills that can be explicated through ePortfolio examples.
• Show the ability to do reliable, deep research by using hyperlinks in a search portfolio. The viewer can actually follow each search by clicking the appropriate link, which, in turn, is explained by accompanying text.
• Discuss how each student selected items for inclusion. This gives you an opportunity to demonstrate how you helped the student develop critical, reflective skills.

Outcomes
In your own ePortfolio, make a goal of Course Assessment: Name of Your Course. Then create a separate ePortfolio just for the course you are assessing. Use it as part of your own personal ePortfolio package that is made available to your students. Be frank in talking about your course goals, your successes and your failures. Let students know that you, as a human, wrestle with individual course planning and goal issues. In short, be reflective in the same way that you are urging them to think about their experiences. The result of this openness will most likely be a pleasant surprise.

This also will be very helpful in ongoing course assessment. As your students read your own ePortfolio, encourage them to come to you with suggestions about how you might improve. I saw the positive results of such sharing recently.

One of my responsibilities at Sacred Heart is to teach at least one section and generally oversee CS100: Introduction to Information Technology. Taken by about 500 students each year, this course touches a large percentage of our undergraduates at some time in their career. In planning each semester’s content, I make certain assumptions. It is very helpful to check these assumptions with the students themselves.

Last semester I had decided to downplay PowerPoint, reasoning that most students already learned this relatively intuitive program in high school, and that they did not need much further instruction at the college level. After asking for some assessment about one month into the course, I quickly discovered how wrong I was. The single most requested addition was more information on PowerPoint. While they were familiar with program basics, a majority of students had a different need: to be very proficient so that they could construct the absolute best presentation possible when required in future classes. They understood how versatile and robust PowerPoint could actually be, and wanted instruction on how to tap the program’s potential. My curricular assumption was wrong. As a result, the course was revised on the fly.

Such ongoing, helpful assessment is possible with the help of your own ePortfolio. Here you can show that you truly are a reflective instructor. Students can be invited to share your thoughts and to provide feedback. Further, by using the ePortfolio in this manner, you encourage students to become partners in their own learning experience.

By taking advantage of these sharing and reflective ePortfolio characteristics, you can provide course assessment documentation for:
• Collaboration on achieving student outcomes
• How one required course prepares a student for the next
• How clearly an instructor articulated the desired goals for course
• Pedagogical improvement over time

Perhaps the most important aspect of this exercise is that you show your students you believe in the product: Your own ePortfolio demonstrates the principles you espouse in class.

Relevance
Your personal ePortfolio offers many opportunities for students and colleagues to see how your course might help in other parts of education or in training for the outside world after graduation. Take advantage of that opportunity to demonstrate particular competencies. For inspiration consider the work of Nam Tran at http://portfolio.neuropunk.com/display.php?type=program_professional. Tran uses his ePortfolio to list and discuss particular software competencies. In this educational atmosphere that values instructional technology and digital learning, you might follow Tran’s example by building your own portfolio of software competencies.

Consider providing evidence that links your course to your institution’s mission. While this probably won’t improve your student evaluations, it will certainly help in the tenure process. Faculty members increasingly hear how they should become citizens of the entire university, rather than viewing themselves as primarily department members or scholars wedded to a particular research agenda. This mission linking is done very well at Georgia’s Kennesaw State University, http://edtech.kennesaw.edu/21c/. Here we can see how the ePortfolio is used to fulfill the University’s mission to produce productive global citizens. You can probably find similar ways that your own ePortfolio use ties into the mission statement of your institution.

ePortfolio as Part of a Pedagogical Improvement Program
Having already demonstrated your course’s relevance to both students and the institution, you might then look at how it fits into your department. Here you will want to link assessment findings to program improvement. The ePortfolio offers a wonderful opportunity for data gathering to support this goal. Presumably pedagogical improvement constitutes one key goal of every academic department. There is, in fact, some evidence that building an ePortfolio actually makes one a better instructor.

Helen Barrett (2004), perhaps the single most prolific ePortfolio researcher, poses this question: “Does creating an electronic teaching portfolio lead to more reflection on one’s practice? We have some research that shows that teachers who reflect on their practice have students with higher achievement.” You can then develop a solid argument that your department’s program for improving classroom teaching benefits from the professor’s own ePortfolio development.

Finally, think of developing your own course assessment rubric that links your class to department and institutional goals. This will show that you are a team player, that you think of yourself as a member of the overall university, not just someone out there teaching your own field of interest, and that you are continuously interested in pedagogical improvement.
References


Selected Resources

Barkley, Elizabeth, Carnegie Scholar Course Portfolio, available online: http://kml2.carnegiefoundation.org/gallery/ebarkley/


International Education Research Converence, available online: http://www.aare.edu.au/01pap/

New England ePortfolio Summit, available online: http://www.nercomp.org/sigs/0304/040602ePort/060204ePortTrent.pdf

Appendix A: Online ePortfolio Assessment Rubrics

- [www.towson.edu/~pyran/wportfolio/criteria.htm](http://www.towson.edu/~pyran/wportfolio/criteria.htm). Although it is designed specifically for students who want to be teachers, this rubric is an excellent example of how careful, detailed description can help students understand tasks.

- [www.uwstout.edu/soe/profdev/eportfoliorubric.html](http://www.uwstout.edu/soe/profdev/eportfoliorubric.html). Another assessment rubric for future teachers. This one focuses on self and peer evaluation.


- [www.helenbarrett.com/portfolios/EPDevProcess.html](http://www.helenbarrett.com/portfolios/EPDevProcess.html) Barrett is a lucid and productive ePortfolio commentator. Near the end of this long online article she offers a scoring rubric foundation.
Appendix B: Suggested ePortfolio Assignments

How This Course Changed Your Thinking
At the beginning of the course ask your students to write about their philosophy of the particular subject and what they expect from the course. Then, either at the course’s conclusion or at certain points during the course, ask them to reflect on that philosophy and how it might have changed because of their work in the course.

Develop and Post a Resume
Use the ePortfolio software to develop a personal resume. Post the resume and update it as the course goes along.

Demonstrate Your Progress
One of the beneficial ePortfolio characteristics is its ability to help students grow into an ongoing upswing in self confidence. Ask your students to select and comment on a sequence of work that demonstrates their intellectual growth.

Dynamic Spreadsheets
There are many stories about how students landed either summer or permanent jobs because of special abilities and experiences. A knowledge of Microsoft Excel is one of the most frequently sought after job market skills. Ask your students to download a trial version of the Xcelsius program (It can be found at [www.infomersion.com](http://www.infomersion.com)). Then ask them to study the program and use it to produce a dynamic version of an Excel spreadsheet that they have created. The resulting file will become an important part of their ePortfolio, demonstrating both the ability to do what-if analysis and also how to effectively communicate ideas about that analysis.

Create and Edit Screen Captures
Effective screen captures can be an integral part of any ePortfolio. Ask your students to go to [www.screencapture.com](http://www.screencapture.com), select a program, download a trial version, and learn how to use it. They can then utilize this new software skill to add a new level of graphic capability to their ePortfolios. A variation on this assignment would be to have the students download two or three sample programs and evaluate each one in reference to its ePortfolio usefulness.

Value of Instant Messaging
We tend to think that Instant Messaging is for students only. But increasingly the medium is being adopted by more instructors. An assignment idea is to capture the Instant Messages between student and professor. These could then be saved into an ePortfolio and used to demonstrate communication skills.

What About General Education Requirements?
Students often complain about having to take required courses. They don’t see any value in taking classes that either will not help in the job market or do not relate directly to their major. Since the ePortfolio is partially about reflection, assign them the task of looking at your institution’s General Education requirements, then writing about why they think each one (and the group as a whole) is a good or bad idea. A reflection piece like this could be a valuable part
of any ePortfolio. A variation on this assignment would be to ask students to write the GenEd evaluation as first-year students, then reconsider it just before they are about to graduate.

The ePortfolio Learning Process
Frequently students struggle with the ePortfolio concept. It is often especially tough at the beginning. After your students have become comfortable, ask them to write a reflective piece evaluating what ePortfolios taught (or did not teach) them about the learning process itself.

Helper Programs
Many students are not aware of shareware. Have them search the web for third party helper programs that would assist them in building artifacts for their ePortfolio. Ask each student to find a program, evaluate it, and demonstrate its use in her ePortfolio.

Showcase Portfolios
Ask students to build a short, very specific ePortfolio to showcase one capability. For example, you might ask them to include their best work; work that demonstrates how they have improved during the semester; and the single assignment about which they were most disappointed. Probably the most valuable part of an assignment like this is the student reflection: why she included each particular piece. The inspiration for this question came from http://www.flaguide.org/cat/portfolios/portfolios4.php. A longer discussion of showcase portfolios can be found by visiting this site.