CHAPTER 6.

CAREER EPORTFOLIOS: RECOGNIZING AND PROMOTING EMPLOYABLE SKILLS

Karen Bonsignore

New York City College of Technology

New York City College of Technology "City Tech," which is part of the City University of New York (CUNY), began its ePortfolio Project with Title V grant funding in 2001. The project was institutionalized when grant funding ended in 2006. Since it began, the City Tech ePortfolio project has provided well over 5,000 students from many departments within the college the opportunity to prepare a Career ePortfolio to be used to showcase their professional development and academic skills in the form of a digital résumé. The Career ePortfolio enables students to store their work, document what they have learned in college, and demonstrate how college has prepared them for a career.

CAREER EPORTFOLIO DEFINED

A Career ePortfolio is a specific type of portfolio that is created by students to showcase their best academic work and unique attributes that may not be demonstrated on a traditional résumé or during an interview. A Career ePortfolio may include artifacts such as an introduction or homepage, various academic examples, a statement of professional goals, work experience, internships, and a résumé. The Career ePortfolio is a dynamic document that can be viewed from any Internet-enabled computer or stored on other digital storage devices. An ePortfolio website address can easily be sent to multiple prospective employers both locally and around the world. In the case of a graduate applying for a job, detailed information about the student is not always easily added to a pen and paper résumé, but may be included effectively in an ePortfolio. For example, a student can post actual examples of their papers, artwork, engineering designs,

budgets, reports, architectural drawings, advertising brochures, and PowerPoint presentations to demonstrate their skills (Zhang, Olfman, & Rachtham, 2007). They can also emphasize skills that are relevant to their career objectives.

In addition to creating a dynamic document for employment and graduate school, students write a brief reflective statement about their professional goals. The professional goals statement may be short term such as when they graduate or long term, 5 to 10 years after graduation and they have gained experience, or it can be a combination of the two. Goals also may include pursuing an advanced degree or gaining additional experience in related fields or a desire to move into management or their own business. Students are encouraged to demonstrate how they intend to contribute to their chosen field.

Students producing a Career ePortfolio are encouraged to be creative, but choose design elements such as colors, backgrounds, graphics, and fonts that show their work at its best. Discussion regarding principle elements of design, as well as rhetoric and purpose, is critical in such portfolio design. The goal of a Career ePortfolio is to present professional and academic information in addition to presenting a professional and creative image, demonstrating functionally literate skill sets. This is the type of development called for by scholars, recently, like Shepherd and Goggin (2012) in "Reclaiming 'Old' Literacies in the New Literacy Information Age: The Functional Literacies of the Mediated Workstation."

Using Technology to Its Greatest Advantage

The City Tech Career ePortfolio project allows students to work with state of the art multimedia technology as they explore their career paths and professional development opportunities. This generation of students has been plugged into technology since the day they were born. They grew up with educational games, sophisticated software programs and the internet. They are comfortable communicating with computers, cell phones and through social networking. Creating a Career ePortfolio demonstrates that a student is able to use technology creatively and in a professional manner. The Career ePortfolio is an excellent way for students to "showcase" their best work to prospective employers, internships, and colleges. The Career ePortfolio allows students to build and share a dynamic résumé in a multimedia format. Students can share their Career ePortfolio with anyone connected to the internet anywhere in the world with a simple click of a mouse. Creating a Career ePortfolio allows students to take advantage of the 21st-century technology skills they are comfortable using. Students enjoy working with technology because they are comfortable with it. Although creating a Career ePortfolio may be new to most students, the learning curve required to create one is generally short because of students' previous technology and computer experiences.

STUDENT BUY-IN

Because students feel that the Career ePortfolio project is meaningful to their future when they graduate, as evidenced by many reflective statements, most enjoy working on their ePortfolios. Students understand that an ePortfolio is a way to help them stand out in a crowd of sometimes more than a hundred applicants applying for the same job. By including a professional goals statement as part of their ePortfolio, students are encouraged to think early in their academic career about their course work, graduate school, career path and professional development. Working with technology to create the ePortfolio is another plus that keeps students interested. The template system used at City Tech allows all students, from those who have only novice computer skills to students with the most advanced skills, the ability to create, update and maintain their ePortfolios. See the online version of this book for examples. All City Tech student ePortfolios are stored and maintained for no charge on the college server. This allows students to update their ePortfolio after graduation and provides storage of their documents. Many students take advantage of this feature by updating their ePortfolios after they have graduated and earned some work experience. Alumni ePortfolios remain on the server for five years after graduation.

WHO OWNS THE CAREER EPORTFOLIO?

A Career ePortfolio is the individual work of the student. Although it is stored on the college server, only the student may make changes to or delete his/her work. Collectively, the ePortfolios may be used for a single course, program or college-wide assessment purposes. Assessment will be discussed later in this chapter but it is important to note that the purpose of a Career ePortfolio is that it is student-owned for highlighting the student's best work and marketing his/her academic and career skills. Administration reserves the right to remove ePortfolios with questionable content. Any ePortfolio that is deemed inappropriate for posting on the Internet can be blocked from viewing until the student has been contacted and the ePortfolio has been revised. All students participating in ePortfolio program must sign a CUNY Computer User Contract. When students first start the ePortfolio project at City Tech, they sign a contract with a disclosure that their website may be seen by anyone with internet access. They are informed of the purpose of a professional "Career" ePortfolio and the reper-

cussions of posting off-topic content. Students are encouraged not to post personal contact information because of the online aspect of the ePortfolio. Each student uses campus email instead of a personal email as contact information. The way ePortfolios are stored on the college server they are not easily found by search engines. The student generally must give their ITP web address to visitors or add it to a cover letter or résumé. Students are cautioned to always keep their ePortfolio updated and professional and follow the general rules of safety that apply to sharing information over the Internet.

Most Career ePortfolios are created as part of a single class project or a program including multiple courses. A Career ePortfolio may also be part of an academic club or society. In each cohort, a faculty member works with the students to mentor the online content. Students are encouraged to submit drafts to their professor before posting the final project. Similar to paper based assignments, ePortfolios may contain spelling and grammatical errors, which can be caught early if drafts are reviewed. Faculty often include the ePortfolio course requirements in the syllabus to guide students to produce a professional ePortfolio. Peer competition among the students in a class is a good way for the students to see other ePortfolios and improve their own work.

Generally, most students enjoy working on their ePortfolios. Today, students are more comfortable with online technology and want more computer enhanced learning assignments in their classes. This is no surprise since the current generation of students that have grown up with computers in their homes and communicate predominately through social networking. Being able to apply for a job or graduate school on-line seems natural to today's students. They embrace the technology as well as the purpose behind the ePortfolio.

Below is sample selection of students' comments on what they liked about creating their ePortfolio:

Creating my ePortfolio allowed me to display my accomplishments on the web.

It was something new to me and I enjoyed the challenge.

My work can be posted online, so employers can see it.

Once it's finished, I can forward the address to any employer, friend, or person of my choice. Also, I would have a chance to express myself in full and employers can learn more about me!

It gave me a chance to organize my skills and put them to use in a professional and technical way.

People can see my work around the world.

My ePortfolio helped me to organize my thoughts.

I realized that I want to continue with my career and I want to go on for my Master's degree.

The process itself (of creating the portfolio). I've never done anything like that before so it was fun.

It's already over, but we are lucky to have access to it in order to update.

This experience provided me with a chance to write about my thoughts, experiences and express my talents openly for others to share. It offered me a chance to allow people to see the real me.

I enjoyed creating my eVideo for my ePortfolio.

I was able to think about my long term goals.

I learned more about my industry and have a clearer understanding about where I want to be.

The ePortfolio project helped me think in depth about what I want to pursue as my career. It also made me analyze what I have accomplished and what I still need to accomplish.

ROLE OF FACULTY

Faculty are encouraged to develop clear *learning objectives* for the course/program and involve the implementation of the ePortfolio project into the course/program and the department's overarching *assessment* plan. Faculty are responsible for grading ePortfolios and using an electronic roster to view the

student Career ePortfolios. When faculty are surveyed, they overwhelmingly responded that 1) they enjoy participating in the ePortfolio project, and 2) the ePortfolio project provides them with an additional way to assess their students' skills. Faculty new to the Career ePortfolio project should be supported with course preparation time, technology training and training in online pedagogy with details on the objectives of student Career ePortfolios.

If publishing a Career ePortfolio online so students can present themselves to employers is the main purpose, then the role of faculty is to partner with the students to help them develop their ePortfolio in a professional style. The process starts with clear instructions laid out in the syllabus so that the students know what will be expected and when assignment deadlines are due. Faculty should guide students to use professional backgrounds, colors, fonts, pictures and graphics. The style of the ePortfolio as well as the number and type of academic examples that are placed in the Career ePortfolio are important. Faculty who provide feedback throughout the process and ask for drafts before the final posting will receive a higher quality of work submitted. Generally, participation in the ePortfolio project is not "more work" for a faculty member, it is just different since they are grading the students' work or academic examples posted online rather than in paper formats. The same coursework or academic examples that were required before the ePortfolio are still a required part of the course, however, now the assignment has an online component. To simplify the grading process, many faculty use a Grading Rubric to score projects (Fox & DeLorenzo, 2009). A copy of an ePortfolio Rubric is included in the assessment section of this chapter. Faculty teaching ePortfolio content become facilitators in the learning process thereby fostering a transformation of the students from passive to active learners. Online and technology enhanced education is learner centered.

Creating an ePortfolio is a very creative process. Communication between faculty and students is paramount. Today, students want and expect faculty to be proficient with technology and incorporate it into their teaching. At the very least, students expect to be able to communicate with faculty via email, access online resources, have access to the Internet activities, and discussion boards. Electronic SMART classrooms are becoming more commonplace. The multiple uses of technology for teaching and learning are evolving and ePortfolio is a part of the advancement. The hands-on training of the ePortfolio creation is usually obtained in an ePortfolio computer lab with technology mentors not faculty. Since the creation of templates and online commercial products has made the technical part of creating the website easier, the website creation is secondary and the role of the faculty is to train the students regarding the content they place on their ePortfolio. Faculty are responsible for guiding the students and

grading the ePortfolios. As for the grade given for the ePortfolio project, which is determined by the individual faculty member—the higher the grade value of the project, the more time the students will spend on their ePortfolio.

Selected faculty comments on what they liked about the ePortfolio project include:

The ePortfolio project supported those students who may have never used a computer or attempted to access the internet. For those who had, it increased their computer skills. Many of my students were creative in their presentation of the ePortfolio. Some used sound, movement and other sophisticated graphics.

In terms of the content, it challenged the students to perfect their writing skills since it is viewed in a public forum. The choice of content also encouraged them to make their decisions in terms of confidentiality and explanation of their career for the lay person to understand.

For those who had yet to design a résumé, many students completed this ePortfolio exercise in their second year of college. Grammatical preciseness, attention to detail, layout and presentation were paramount for this type of assignment.

When starting this project, I didn't see how the Career ePortfolio could be really useful for all students. But after the very first semester, I was excited to see how this project took to an absolutely new level the presentation of students. The projects and assignments of the course were presented in a structured and organized way, and were easy to read and analyze. Having ePortfolios to review together allowed us to have class discussions about the projects. The ePortfolio added a "human touch" to my courses: viewing and discussing portfolios with short biographies of the students, their goals and dreams was very moving, and allowed all of us to learn more about each other.

Students are educated for roles in industry and often seek recognition for their efforts from the eyes of "others"—clients, professors and/or peers. This makes perfect sense for their professional development but has a drawback, if,

in the course of their education, they lose sight of the relationship between what they are learning and the value of their own creativity and critical thinking in choosing and developing content.

I cannot emphasize enough the insight and self-knowledge gained by these students in creating their ePortfolios. It was a new and valuable experience for them to consider a presentation in terms of WHO they are, WHERE they are on their journey, and WHAT they hope for. The project created self-awareness, and a new, healthy self-consciousness about their development over time and its validity as an achievement. In addition, the ePortfolio project gave my students the opportunity to hone their writing skills.

ALLOCATION OF RESOURCES/SUPPORT FROM ADMINISTRATION

Projects that use technology are usually costly. Students do not live in a 9 to 5 world. They expect access to technology all the time. They function in an international world with full access through the internet, and they want and expect services where technology works the way it is supposed to work. Administration not only must find ways to fund the growing need for technology on-campus and access off-campus, but also support student and faculty training. Faculty participating in ePortfolio projects must be supported with course preparation time/release time/reimbursement, technology training and support, professional development opportunities and technical resources. Training workshops for students and faculty as well as a dedicated ePortfolio computer lab are common things that are part of ePortfolio projects.

ASSESSMENT AND CAREER EPORTFOLIOS

ePortfolios allow faculty to assess work products and artifacts that are not easily graded or assessed with traditional methods. Assessment of student's ePortfolios will allow faculty to look at the larger picture. Regional accreditation agencies and the majority of professional program accreditation bodies now emphasize *student-learning outcomes* as the standards to be met. Accountability to funding sources and public use of data to inform decision-making guide the faculty. As the popularity of ePortfolio use grows, so does its use in assessment. See Barrett and Knezek (2003) for more infomration on issues related to assessment and accountability. Examples of types of assessment that can be done via ePortfolio projects include: 1) usage statistics, 2) rubric grades, 3) faculty surveys, 4) student surveys, and 5) student-learning outcomes. A common rubric can be used to assess student-learning outcomes and can be custom tailored

for a course, department/program or the university. Using a grading rubric for ePortfolio is useful for individual courses as well as programmatic and collegewide assessment. Data collected over time will tell if students are improving in key areas. Additionally, weak areas can be identified and addressed. Comparative data is helpful to demonstrate trends among courses and departments within the institution (Goldsmith, 2007).

Table 1 below is a sample ePortfolio grading rubric. Students should be given a copy of the rubric with the syllabus. It is also helpful to have students grade their own or each other's ePortfolio using the rubric a few weeks before the final project is due as a form of self- and peer- assessment.

Table 1. ePortfolio Rubric

	Exceptional	Effective	Acceptable	Unsatisfactory	Non-Submit	Score
	points	points	points	points	<u>0</u> points	
Response to ePortfolio Assignment	Followed all of the professor's directions; completed the as- signment; added extra material.	Followed most of the professor's directions; com- pleted the assignment.	Did not follow most of the professor's directions or failed to complete part of the assignment.	Disregarded professor's directions and failed to complete a significant part of the assignment.	Did not com- plete the ePortfolio assignment.	
Creative Use of Technology	Excellent use of graph- ics, sounds, e-mail, links, additional software and Internet resources.	Several resourceful sounds, graphics, and links used.	A number of uses of sounds, graphics and links.	No evidence of inde- pendent resources: monotonous presentation.	Did not com- plete the ePortfolio assignment.	
Attractiveness	Graphics, colors, font size attractive and easy to read: enhanced portfolio.	Graphics, colors, font size appropriate.	Graphics, colors, font size distracting or adds little to the portfolio.	Graphics, colors, font size distracting and difficult to read: detracts from the portfolio.	Did not com- plete the ePortfolio assignment.	
Professional Image	ePortfolio presents a excellent professional image.	ePortfolio presents an overall good professional image.	ePortfolio pre- sents an overall acceptable professional image.	ePortfolio presents an overall non-profes- sional image.	Did not com- plete the ePortfolio assignment.	

Grammar and Punctuation	Flawless grammar and punctuation.	Very few gram- mar and punctuation errors.	Some grammar and punctuation errors.	Several grammar and punctuation errors.	Did not com- plete the ePortfolio assignment.	
Personal Reflection	Excellent personal reflection demonstrated.	Truthful personal reflection demonstrat- ed.	Some personal reflection demonstrat- ed.	Little personal reflection demonstrated.	Did not com- plete the ePortfolio assignment.	
					Total:	

Professional accreditation agencies recognize ePortfolios as a way to measure student performance. The Career ePortfolio is similar to other types of electronic portfolios, that is, reflective, course, and personal ePortfolios. However, the Career ePortfolio emphasizes the artifacts posted will be for a specific audience and the ePortfolio when finished will become public or will be published online. Career ePortfolios are an excellent way to measure studentlearning outcomes. See Kenny et al. 2003, for more on perceived barriers to documenting outcomes with validity and reliability. A faculty member or a team of faculty, when measuring large number of student portfolios, can easily grade ePortfolio rubrics via a course roster (list of students) set-up in a simple word processing or Excel document. A roster cuts down on the time it takes to view portfolios. If a large sample is to be evaluated, the assessment team may grade every tenth or fiftieth portfolio rather than every ePortfolio. Taking a sample from a large cohort to measure English grammar and punctuation only, may be an accurate and quick way to use computer technology to measure the student-learning outcomes of students that have completed ePortfolios. The entire ePortfolio can be assessed or only a sample of features depending on the information needed.

OBTAINING JOBS USING CAREER EPORTFOLIO

Tracking the use of Career ePortfolios once students graduate from the institution has proved difficult for many programs offering ePortfolios. Like graduate surveys, it is extremely difficult to obtain hard data from alumni once they leave campus and enter the job market. We know of some individual success stories from students who used their Career ePortfolio with success to obtain

both interviews and jobs by sending the link to their ePortfolio website to potential employers.

An ordered way to keep in touch with the students who become Alumni of the university is to transfer the Career ePortfolio over to either the Alumni Association or the Career and Transfer offices within the university to follow-up and store the ePortfolios on a server after students graduate.

SUMMARY

A major advantage of the Career ePortfolio is that students are able to market themselves to employers and graduate schools in a professional format that may give them an advantage over other candidates. The digital format of Career ePortfolios makes large assessment projects easier.

Sharing a Career ePortfolio is a way of sharing best practices or an individual's talent. Technology is used in such a way that both the students and faculty see the benefits of creating a Career ePortfolio. Since the Portfolio is in a digital form, it is easy to add artifacts that can personalize the website and make it easy to share. Creating a Career ePortfolio early allows students to identify professional goals and explore career options, which can help them focus their professional development while preparing them for the next phase in their professional career.

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