

Principles and Practices in Electronic Portfolios

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Introductory Premises

Composition professionals in post-secondary institutions—composition faculty, writing program administrators, and technology staff—share concern and responsibility for helping students learn to write at a college level, using the most effective communication technologies. Disciplinary practice and research suggest that portfolio assessment has become an important part of the learning-to-write process.

In turn, electronic portfolios (e-portfolios) have become a viable institutional tool to facilitate student learning and its assessment. E-portfolios can be “web-sensible”—a thoughtfully arranged collection of multimedia-rich, interlinked, hypertextual documents that students compose, own, maintain, and archive on the Internet or in other formats (e.g., CD-ROMs, DVDs). Web applications designed to support e-portfolio composition can offer additional opportunities for providing structure, guidance, and feedback to students, and can provide students with opportunities to connect selectively with multiple audiences.

E-portfolios communicate various kinds of information for the purposes of assessment. For example, e-portfolios can:

- Identify connections among academic and extra-curricular learning for admission to higher education and vocational opportunities

- Demonstrate applications of knowledge and critical literacies for course or programmatic assessment

- Provide evidence of meeting standards for professional certification

- Display qualifications for employment

- Showcase job-related accomplishments beyond schooling, for evaluation or promotion

Represent lifelong learning for participation in public service

However, these purposes do not capture important kinds of student learning in composition courses that should carry over to writing tasks in other courses and contexts, e.g., students understanding their own writing process or learning style, or students setting their own goals for future learning.

As e-portfolios assume a greater role in institutional assessment, First-Year Composition (FYC) will most likely serve as the course that introduces them to students. Therefore, FYC faculty may have a particular, invested interest in identifying the principles and practices of e-portfolio development that prioritize student learning. Such principles and best practices, based on the theoretical knowledge that classroom evidence substantiates, enable composition faculty to provide students with experiences that help them expand and specialize their writing skills for a variety of cross-disciplinary programs and professional contexts beyond FYC.

Suggested Principles and Best Practices

E-portfolios develop slowly, taking many forms that are unique to the missions of different programs and institutions. No list of principles and practices can describe such assessment *in toto*. Neither can any list suggest an ideal path of development or endpoint, because e-portfolio projects are dynamic, in-progress projects that necessarily undergo changes that are influenced by institutional exigencies and available resources.

Nonetheless, this document proposes that successful uses of e-portfolios share in common certain principles and best practices. The following suggested principles—accompanied by supportive practices in the teaching of writing—can inform the use of e-portfolios in writing programs. These principles and best practices can also inform cross-disciplinary faculty, program directors, and university administrators, as e-portfolios are adapted on a wider institutional scale.

It may be most useful to consider these principles and practices in conjunction with the National Council of Writing Program Administrators' "Outcomes Statement for First-Year Composition," since that document provides a sound foundation upon which successful writing instruction and assessment rests.

Principle #1: Learning Outcomes—Students are guided by clearly

articulated individual, course, programmatic, or institutional outcomes in their collection, selection, reflection upon, and presentation of “artifacts” (various electronic documents) in the e-portfolio. At the same time, students structure portfolios around their own learning goals.

Supportive best practices

Composition Faculty:

Familiarize students with programmatic learning outcomes
Share the rubric that will be used in e-portfolio assessment
Provide students with models of e-portfolios that illustrate different ways of meeting programmatic outcomes and satisfying rubric criteria
Help students identify personal learning goals and adapt programmatic outcomes to those goals
Design e-portfolios that demonstrate their own learning goals in teaching

Writing Program Directors:

Familiarize faculty with learning outcomes that the profession values nationally
Collaborate with faculty to establish local programmatic learning outcomes based on actual classroom activities and assignments
Collaborate with faculty in designing rubrics that consistently facilitate a valid and reliable process of measuring programmatic learning outcomes
Collaborate with faculty to cull various models of successful e-portfolios
Observe protocols of permission and confidentiality in obtaining model e-portfolios for instructional purposes
Design e-portfolios that demonstrate their own learning goals in writing program direction

Technology staff:

Maintain an archive of student and faculty e-portfolios that successfully illustrate programmatic learning outcomes in various ways
Make the archive easily accessible for instructional purposes
Collaborate with faculty and program directors to determine how technology facilitates programmatic learning outcomes

University Administrators:

Encourage authentic assessment driven by locally-designed programmatic objectives and outcomes

Provide resources for writing programs to develop and share learning outcomes with other programs

Highlight how e-portfolios demonstrate student learning outcomes in annual institutional reports and accreditation cycles

Factor faculty and director e-portfolios in reviews for promotion and tenure

Principle #2: Digital Environments—Students make optimal use of the technological features of electronic writing, collaboration, and records-keeping, and consider the larger implications of making e-portfolios accessible on the Internet.

Supportive best practices

Composition Faculty:

Introduce students to concepts and applications of visual rhetoric on the Internet

Teach students to use features of web-design in rhetorically effective and ethical ways (linking, choosing images, creating webpage formats)

Discuss protocols for obtaining permission and documenting Internet sources

Help students experiment with multimedia possibilities for composing documents

Encourage students to collaborate in web-designing sessions

Facilitate critical discussions on the benefits and disadvantages of students allowing public access to their documents

Writing Program Directors:

Train faculty how to create and teach e-portfolios well in advance of initial attempts to implement programmatic

assessment

Show faculty how to implement web design for e-portfolios in easy-to-teach steps

Give faculty a clear rationale and explanation of how e-portfolios enhance digital learning and assessment, so faculty can explain the same to students

Technology staff:

Develop and test templates for constructing e-portfolios, to assure consistencies in design, simple layout, and user-friendliness

Train technology mentors to work individually or in class with students and faculty

Provide ongoing, drop-in workshops and studios to support students and faculty

Oversee development of online manuals to assist faculty in webpage and e-portfolio design

University Administrators:

Establish budget lines to ensure on-campus technological support and training for students and faculty

Show long term commitment to e-portfolios (e.g., purchase equipment, maintain equipment replacement cycles, engage software consultants, provide central electronic sites where students may access their e-portfolios at any time from any location)

Principle #3: Virtual Identities—Students represent themselves through personalized information that conveys a web-savvy and deliberately constructed ethos for various uses of the e-portfolio. Students manage those identities by having control over artifacts and who sees them.

Supportive best practices

Composition Faculty:

Facilitate critical discussions of how writers represent

themselves in online resumes, profiles, etc.

Help students recognize what information, digital forms, and specific artifacts can best represent them as learners

Encourage students to represent their multicultural backgrounds effectively

Acquaint students with how they construct professional ethos in their own e-portfolios

Writing Program Directors:

Acquaint faculty with any institutional policies or protocols relevant to Internet publishing, student confidentiality, and personal information

Technology staff:

Set up access protocols that protect student confidentiality and control over who may read e-portfolios, allowing them selectively to disclose their work in different forms to a variety of audiences

University Administrators:

Provide guidelines for maintaining student confidentiality and use of e-portfolios as an assessment tool

Principle #4: Authentic Audiences—Students engage in audience analysis of who they intend to read their e-portfolios, not only to accommodate faculty, but also employers, issuers of credentials, family, friends, and other readers. Students coordinate access to their e-portfolios with faculty, programs, the institution, and other readers.

Supportive best practices

Composition Faculty:

Facilitate critical discussions of different readers' expectations about grammatical usage and digital styles

Teach conventions of user-friendly webpage design and functionality

Identify the readers who will assess students' programmatic e-portfolios, and familiarize students with those readers' expectations

Help students identify and cultivate appropriate outside readers to respond to their e-portfolios (e.g., former teachers or employers)

Ask students to discuss changes they would make to "re-purpose" e-portfolios for different readers, e.g., program directors in their major, prospective employers, evaluators of transferable course credits

Encourage students to understand that e-portfolios are dynamic, not static, websites that they will continue to change as they encounter new readers in various contexts

Writing Program Directors:

Invite students to present their e-portfolios in faculty training sessions

Develop protocols to inform students and faculty about expectations for e-portfolio assessment (e.g., required minimal content, elements of format, reflective artifacts)

Technology staff:

Design websites that showcase programmatic uses of e-portfolios for purposes of recruiting students, informing administrators, attracting employers, and educating legislators or the public (while maintaining the technology that allows students to continue to choose and change whatever artifacts are put on public display)

University Administrators:

Encourage involvement of students in campus-wide workshops to acquaint cross-curricular faculty and program directors in all disciplines with various uses of e-portfolio assessment

Include student representation in university assessment committees

Provide recognition and awards for excellence in student e-

portfolios

Principle #5: Reflection and E-portfolio Pedagogy—Students create “reflective artifacts” in which they identify and evaluate the different kinds of learning that their e-portfolios represent. In particular, students may explain how various forms of instructive feedback (from faculty, Writing Centers, peers, and other readers) have influenced the composition and revision of their various e-portfolio artifacts, making teaching methods and learning contexts more transparent to their readers.

Supportive best practices

Composition Faculty:

Teach students different formats and forms that facilitate reflection on their learning at various stages of drafting and web-design (e.g., reflective cover letters that introduce and link readers to various artifacts; concept maps)

Teach students that ongoing, rigorous reflection is a crucial part of the process of creating e-portfolios that are dynamic, not static websites

Provide opportunities for students to give each other feedback on e-portfolio artifacts, including reflective artifacts

Give students clear, constructive feedback that encourages revision and offers technological tips for improvement

Encourage students to consult with Writing Center tutors or other institutional support services

Collaborate regularly with other faculty, technology staff, and program directors to share the most effective ways to provide feedback and teach reflection

Writing Program Directors:

Acquaint faculty with exemplary e-portfolio formats and forms that show how students can effectively link reflective artifacts with their selected written work (e.g., cover letters, concept maps)

Collaborate with teachers to craft effective writing prompts that lead to intellectually rigorous reflective thinking

Give faculty feedback on their own e-portfolios and encourage them to incorporate it in their annual self-evaluations

Technology staff:

Keep program directors and faculty aware of new technologies that have potential for creating reflective artifacts

Coordinate closely with writing program directors and faculty to develop electronic formats that can help track or display the “feedback loop” between writers and responders/ evaluators

University Administrators:

Understand reflection as a critical thinking skill that reinforces student learning outcomes and yields valuable insights about programmatic effectiveness

Oversee campus events that introduce or advance knowledge about reflection and e-portfolio pedagogy (e.g., invite national speakers, sponsor regional conferences)

Principle #6: Integration and Curriculum Connections—Students link artifacts in a flexible structure that (1) synthesizes diverse evidence and ideas, (2) invites linear or non-linear ways to read and evaluate e-portfolios, and (3) makes connections to portfolio-related evidence and relationships distributed across the Internet. Students may therefore use linking to represent how e-portfolio artifacts inter-relate with other courses in the larger context of whole-curriculum learning.

Supportive best practices

Composition Faculty:

Encourage students to show learning outcomes by linking artifacts to earlier drafts, or even to artifacts from earlier, relevant courses

Encourage students to show transferability of learning outcomes by linking artifacts developed in writing courses to cross-curricular courses

Writing Program Directors:

Facilitate discussions with faculty on how e-portfolios can

encourage articulation among related courses in the composition curriculum (e.g., first and second-semester FYC, or FYC and advanced composition courses)

Collaborate with other program directors to stimulate cross-curricular articulation among courses and address shared assessment goals

Technology staff:

Develop e-portfolio systems that feature compatibility with other programmatic or institutional e-portfolio systems

University Administrators:

Encourage faculty, program directors, departments, and colleges to identify and agree upon where in the overall scheme of institutional accountability e-portfolios can play a well-defined, cross-curricular role in student learning and assessment

Endorse and provide resources for writing across the curriculum

Principle #7: Stakeholders' Responsibilities—Students receive the necessary support from faculty, program directors, and university administrators who not only use e-portfolios for assessment purposes and program improvement, but also keep informed about what resources are essential for implementing, maintaining, and accessing e-portfolios.

Supportive best practices

Composition Faculty:

Familiarize themselves with relevant theory and e-portfolio research

Participate in ongoing programmatic assessment of student e-portfolios

Use findings of e-portfolio assessment to improve approaches to teaching

Writing Program Directors:

Acquaint faculty with the most relevant sources available in portfolio learning, research, and assessment

Set up and train a small cohort of faculty to participate in a pilot program when first implementing e-portfolios

Expand e-portfolio assessment gradually

Conduct faculty scoring of e-portfolios, involving mixes of teachers who are experienced and inexperienced with programmatic assessment

Invite teachers to suggest ways to improve training in e-portfolios, and use findings of e-portfolio assessment to improve the program

Report assessment data promptly and provide university administrators with examples of actual student- and teacher-designed e-portfolios that help interpret what the data means

Collaborate with directors who are using e-portfolios at their own and other institutions

Technology staff:

Contribute to the development of open-source software and standards that support e-portfolio implementation and maintenance

Adapt portfolio rubrics to electronic formats that collect and process data efficiently

University Administrators:

Provide start-up funds for writing directors, technology staff, and interested teachers to engage in professional development related to e-portfolios (e.g., conferences, national workshops)

Use e-portfolio assessment findings to help inform further decisions about allocating resources

Principle # 8: Lifelong Learning—Students are able to adapt their e-portfolios to various purposes/ uses beyond their academic careers, enabling their various readers, in turn, to track their learning longitudinally.

Supportive best practices

Composition Faculty:

Introduce students to a range of uses for which e-portfolios are used beyond programmatic or institutional goals

Provide students with models of e-portfolios that have been adapted for different purposes, to show development of learning over time

Demonstrate how their own e-portfolios are examples of lifelong learning

Writing Program Directors:

Coordinate with other program directors and university administrators to develop institutional e-portfolio systems that accommodate longitudinal tracking

Technology staff:

Collaborate with other institutions and organizations, to develop e-portfolio systems that are compatible and interoperable, accommodating “open standards” so that students can easily transfer their e-portfolios to other institutions or sites

University Administrators:

Collaborate with other institutions, state boards of education, and organizations that could provide space and support for e-portfolios that demonstrate lifelong learning

Current examples of well-conceived e-portfolio projects include:

Alverno Diagnostic Digital Portfolio— <http://ddp.alverno.edu/>

California Lutheran University, School of Education Webfolio—
<http://public.clunet.edu/%7Egatherco/eportfolio/index.htm>

Concordia University, Center for Learning and Performance—
<http://grover.concordia.ca/eportfolio/promo/>

E-Folio Minnesota— <http://efoliominnesota.com/>

Elon University Student Portfolios—

<http://www.elon.edu/students/portfolio/>

Illinois State University Portfolio— **<http://portfolio.ilstu.edu/>**

Indiana University Purdue University at Indianapolis—
<http://www.iport.iupui.edu/>

John Hopkins Digital Portfolio—
<http://olms.cte.jhu.edu/olms/output/page.php?id=2845>

Kalamazoo College Portfolio— **<http://www.kzoo.edu/pfolio/>**

Kapi'olani Community College—
<http://www2.hawaii.edu/~kirkpatr/kite/kitelo/>

La Guardia Community College— **<http://eportfolio.lagcc.cuny.edu/>**

Louisiana State University Digital portfolios—
[http://appl003.lsu.edu/acadaff/cxcweb.nsf/\\$Content/Portfolios?OpenDocument](http://appl003.lsu.edu/acadaff/cxcweb.nsf/$Content/Portfolios?OpenDocument)

New York City College of technology ePortfolio—
<http://eportfolio.citytech.cuny.edu/>

Portland State University Portfolio Project—
http://portfolio.pdx.edu/Portfolio/Teaching_Learning/UnderGrad_Learning_Goals/University_Studies/view?p=University_Studies_Assessment

Penn State ePortfolios— **<http://eportfolio.psu.edu/about/index.html>**

St. Olaf College Web Portfolio—
http://www.stolaf.edu/depts/cis/web_portfolios.htm

University of British Columbia ePortfolio—
https://www.elearning.ubc.ca/home/index.cfm?menuClick=4%2F9%2F&p=main/dsp_eport_examples.cfm&

University of Denver Portfolio Community—
<https://portfolio.du.edu/pc/index>

University of Washington, Catalyst Center—
<http://catalyst.washington.edu/method/portfolio.html>

University of Wisconsin, Eau Claire, University Assessment—
<http://www.uwec.edu/assess/faq/students.htm>

Virginia Tech ePortfolio— **<https://eportfolio.vt.edu/>**

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