

## Mapping ePortfolio artifacts to objectives at different levels

To begin using ePortfolios for either a course or program, it is important to map the products that students create—i.e., ePortfolio artifacts—to specific objectives or standards. Course or program objectives describe what knowledge, skills, or attitudes that you want students to show they have mastered. By assigning projects that align directly with these objectives, students know what is expected and instructors know what to evaluate. When mapping artifacts to the objectives it is also important to think about the level of competency required. For example, asking a nursing student to write down the process for finding a vein and inserting a needle is a lower level of competence than asking that same student to demonstrate that he or she has actually done it (e.g., video clip, observation log written by supervising doctor or nurse in the field). Reflective statements allow students to describe how they feel when performing the skill.

Standards created by outside agencies, such as teacher credential agencies and discipline-specific accreditation bodies, often predetermine what skills and knowledge students need to show. Instructors can still be creative with how students use an ePortfolio to demonstrate their competencies. Instructors can also add components that the standards often do not require, such as reflective statements, leadership skills, and community-based activities.

ePortfolios provide opportunities to accommodate students' different learning styles and different learning needs. If possible, instructors should give students options regarding how they demonstrate skills and competencies. These options can be related to the format used or the content covered in completing the ePortfolio assignment. Examples of different formats to achieve the objective include writing a paper, giving and recording a presentation, or creating a video. Giving options related to content can be as simple as providing four essay questions and asking students to answer one of them, as long as they can show the same skills or knowledge with each one.

Many campuses are shifting away from "checkbox filling" to "intentional and integrated learning." While students must complete all the requirements for a class or program, it is also important for them to know why they are doing it and to make choices about classes or ePortfolio assignment topics that move them toward some goal. Asking students to write reflective statements about individual artifacts is one way to get them to think about why they are doing an ePortfolio assignment and how it relates to the class, the program, or their life goals. They demonstrate integrated learning by providing ePortfolio pieces related to internships, jobs, or other co-curricular work. Reflective statements should demonstrate students' understanding of the links between delivered curriculum, or what the instructor prepares and presents; experienced curriculum, or what the student derives from it; and lived curriculum, or what the student applies throughout his or her life alongside or after the coursework (Yancey, 2008).

Throughout the course or program, instructors can involve others in the evaluation process. Some use student peer review as a way to help students get feedback before submitting artifacts or reflections for a grade. Other instructors solicit experts' review when a student does co-curricular work, such as a field experience class, internship, or oral presentation. If students use an ePortfolio throughout a program, you may construct panels to review final portfolios for completeness, even though the individual artifacts and reflections have already been given

grades from the instructors who assigned them. An oral presentation of the portfolio may also be a part of your assessment strategy.

Some programs invite panels of employers from their field to evaluate ePortfolios after students have graduated to solicit feedback about the methods and types of evidence used to demonstrate competencies. The evaluation of individual student assignments happens at the course level. However if assignments are archived in an ePortfolio, instructors can review artifacts themselves, the student's reflections about the value or meaning of each artifact, and different instructors' feedback about the student's work. In this way, the instructors and advisors can collectively track a student's growth and development, and provide formative guidance about next steps or areas to improve. Departments may also have both formative and summative reviews of a cohort or cluster of student portfolios. The Western Association of Schools and Colleges (WASC, 2008) provides guidelines and a rubric for departments interested in using ePortfolios to assess program learning outcomes.

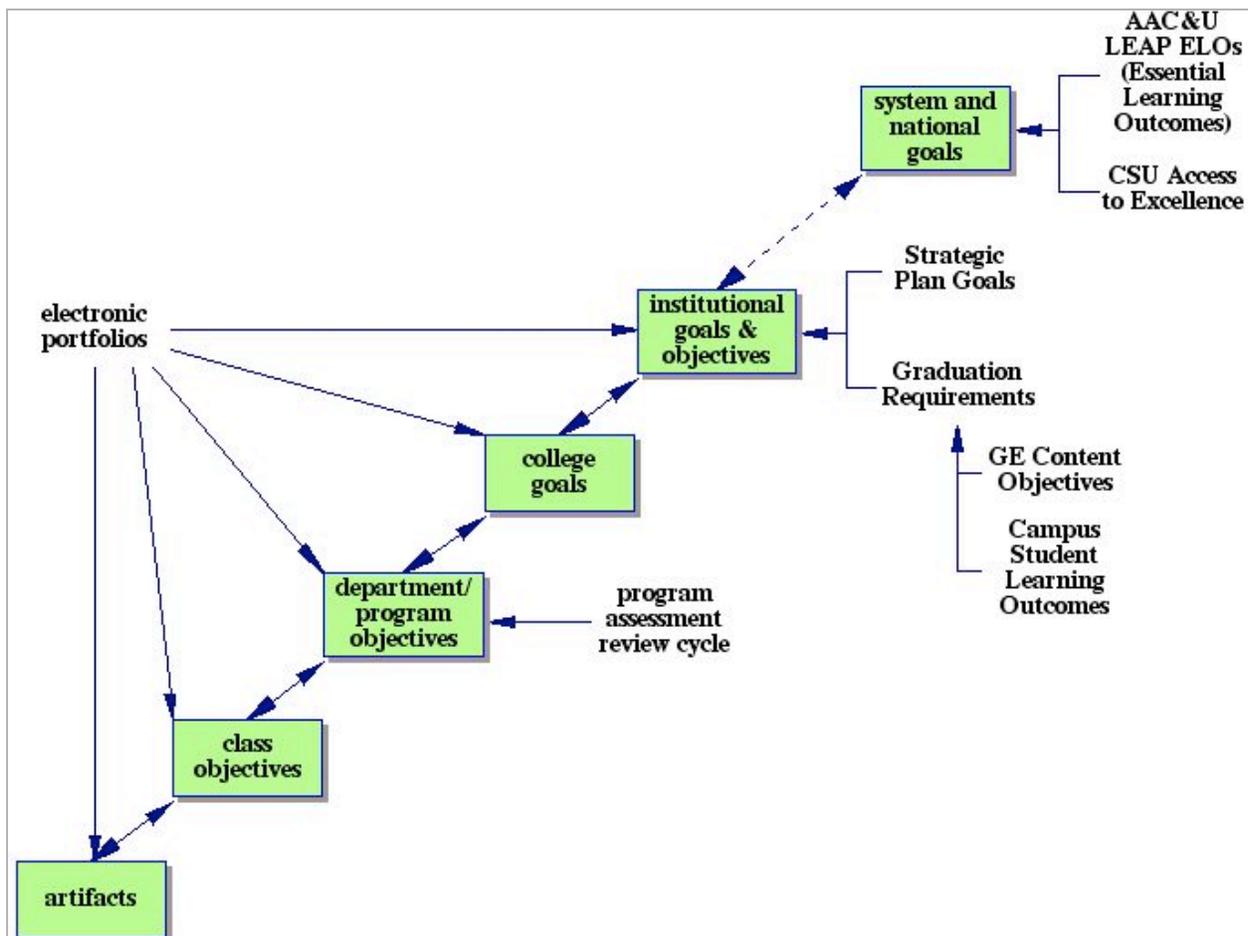


Figure 1. Levels of mapping: from student artifacts to institutional goals and beyond

Figure 1 shows how ePortfolios can be used to map individual student work to the overarching campus goals. Campuses can build on the process from the top down during program review cycles by helping departments align their program objectives with university strategic plan goals and/or graduation requirements. These graduation requirements often include General Education

(GE) content objectives, campus student learning outcomes (SLOs), or both. At the same time, campuses can promote the use of ePortfolios to assess students' achievement of program objectives. Academic technology units and faculty development centers can work with departments and instructors from the bottom up to map course objectives to program objectives. Next, staff and faculty-in-residence can work with individual instructors to identify student projects that would generate appropriate artifacts to demonstrate student competencies. When these two approaches meet in the middle, it is then possible to show the connections between student work and institutional goals.

ePortfolios can extend beyond the campus for purposes of transfer and career bridging. The Association of American Colleges and Universities has identified Essential Learning Outcomes (ELOs) that many institutions use to form their own campus-level student learning outcomes. As more institutions adopt outcomes based on common elements, the transfer process may improve for higher education students. Employers have become stakeholders in the electronic portfolio process as well. Some employers such as K-12 schools rely on discipline-based standards that are sometimes referenced in ePortfolios, via tags or preset menus. As mentioned above, some college and university programs engage local employers in dialogue about what competencies they expect from graduates. This practice builds upon a study commissioned by AAC&U (2008), which included employers' perspectives on the effectiveness of higher education assessment practices. The study participants ranked multiple-choice testing the lowest and authentic assessment strategies—elements typically found in an ePortfolio, such as capstone projects and co-curricular work—the highest.

### **References**

The Association of American Colleges and Universities. (2008, January 9). How should colleges assess and improve student learning?: Employers' views on the accountability challenge. Washington, DC: Author.

Western Association of Schools and Colleges. (2008). Program learning outcomes. Retrieved on July 24, 2008 from WASC website: [http://www.wascsenior.org/findit/files/forms/Program\\_Learning\\_Outcome\\_Rubric\\_\\_080430\\_.pdf](http://www.wascsenior.org/findit/files/forms/Program_Learning_Outcome_Rubric__080430_.pdf)

Yancey, K. (2008, July). Outcomes, reflection, electronic portfolios. Conference presentation at the St. Jerome's University ePortfolio Conference 2008, Waterloo, Ontario, Canada.

### **Other resources**

Committee on Developments in the Science of Learning. (2000). *How People Learn: Brain, Mind, Experience, and School*. J.D. Bransford, A.L. Brown, & R.R. Cocking (Eds.). Washington, DC: National Research Council – National Academy Press.

Educause Learning Initiative – ePortfolios (<http://www.educause.edu/E-Portfolios/5524>)

National Coalition for Electronic Portfolio Research

- Publications & Presentations ([http://www.ncepr.org/presentations\\_publications.html](http://www.ncepr.org/presentations_publications.html))
- Bibliography (<http://www.ncepr.org/bibliography.html>)