Teaching Tips/Notes



Student Portfolios: Authentic Assessment at Its Best

When many of us think about portfolios (particularly we "older, experienced" faculty members) we think about portfolios used by designers and those in the traditional visual and performing arts. In this article, I'd like to explore the changing face of portfolios in the age of technology, and ways that all of our departments in agricultural programs can use them effectively for student outcome assessment.

Why Authentic Assessment?

Many times, in my work as a department head, assessment fellow, and university assessment specialist faculty members have asked, "Why can't we just use exams for all of our assessment? Or just course grades?" A fair question, and one where an entire article could be written in response. For this piece, suffice it to say that students don't buy in to high stakes assessment where there is no opportunity to show in *many ways* what they know and can do. How many times have you heard your students complain about busy work, translated as assignments where they see no relevance to their current or future lives. Authentic assessment values the *student* in the teaching and learning equation. Students should have the opportunity to do real-world, applied work that is assessed by more than just the instructor. This prepares them for their role as a professional after graduation (Stevens, 2008).

With authentic assessment, students have the opportunity to learn and grow through self-reflection, meaningful assignments, internships, service learning, and meaningful feedback from others. There should be an authentic task that teaches content and complex thinking process, with built-in opportunities for self and peer reflection (Snitzer, 1993; Corey, 2012; Kearney, 2013). Think about the following examples taken from University of Wyoming departments:

- 1. Interior Design II is a course where students focus on designing commercial spaces. One semester, students worked with a local church to design the interior of their new building including worship, meeting, cooking, bathroom, and library space. They meet with the church board to ascertain space and use needs, form teams to come up with layout and material plans with costs, then did presentations on their designs for faculty and the church board. Feedback was provided to the students by all in attendance, and a plan or pieces of several design plans were actually implemented.
- 2. ENR 4900 is a two-semester course in Environmental Assessment. In the first semester students read and evaluate literature, then hold discussions to identify an environmental problem for their course focus. Once identified (one year it was the feasibility of a building a power line to transfer power from wind energy turbines from Wyoming to Las Vegas, NV), members from BLM, the Forest Service, DEQ, etc. are brought in to help student understand the complexity of the problems and areas to be addressed. In semester two, students divide into groups to address the key areas of an Environmental Impact Assessment (EIA), such as reclamation, how to get right away across private and public lands, building materials and costs, economic impact, social impact. An EIA is written and presented to key stakeholders and outside faculty members.

Why Electronic Portfolios?

Institutions of higher learning use digital platforms to deliver online, hybrid, blended, and competency-based programs. Most of the existing platforms (such as CANVAS, Blackboard, D2L and others) already have portfolio collection tools that can be "turned on" or customized, sometimes as part of

the existing contract and sometimes for an additional fee. Electronic portfolios allow students to collect and display many kinds of artifacts: video clips, audio clips, photos, papers, projects...the list is nearly endless (Jarrott and Gambrel, 2011). Eportfolios provide the opportunity for authentic assessment at a level paper portfolios could never do (Ury and McFarland, 2001; Jarrott and Gambrel, 2011). In addition, many platforms already provide the opportunity for faculty members and departments to use rubrics to evaluate and give feedback to students.

Some years ago, the Department of Family and Consumer Sciences identified competencies for their students – things they wanted graduates of their program to be able to demonstrate at a satisfactory level. Competencies were identified by looking at other programs across the nation; conducting student, alumni and employer surveys; holding discussion during teaching faculty meetings; and comparing desired competencies for the department with the University of Wyoming student learning outcomes. Faculty members agreed on the following:

- 1. Competencies need to be introduced in a common first year course, then assessed again in a common capstone course.
- 2. Students should be able to choose the materials that they include to demonstrate the competencies (although some programs create "portfolio assignments" and mandate that those be included).
- 3. Students should have the opportunity to self-reflect, identifying what they see as their level of competency (novice, developing, proficient). At this time students suggest activities they intend to pursue to increase their level of competence as they move through their program. In the capstone course students should also have the opportunity to talk about their growth and areas they still want to continue to develop.
- Reviewers should come from more than just the instructors of the course. Instead they should include alumni, employers, members of professional organizations, other undergraduate students, and graduate students.
- 5. Reviewers should be trained to insure inter-rater reliability. This can be done in a retreat using examples of student work, bringing individuals to the session through electronic means as necessary. Faculty members and other reviewers also receive training on giving feedback using a critical friend perspective: honest but helpful in a way that students will benefit and potentially form mentoring relationships with the reviewers.

Portfolios have great potential for multiple departments. Students in a horsemanship class could include videos of their riding techniques to share with more than just their instructor. Veterinary science students could share case study analyses and laboratory results. Microbiology students could share photos of lab results and discuss the findings, then pursue microbiology-related real community problems to present at a conference. Horticulture students could go beyond plant identification to greenhouse studies. Based on your department's competencies and student learning outcomes, what might their portfolios look like?

Things to Ponder

Here are some things to think about as your program investigates the possibility of student portfolio assessment:

1. Portfolios should be protected so that students give permission to reviewers chosen by the department from their discipline/major/area of concentration.

- 2. Portfolios should be portable, so that students can download their portfolios or maintain access after graduation to allow them to share portfolios with potential employers.
- 3. Portfolios should be affordable to the student and the department. There are some free portfolio sites, although for many once one hits "publish" they are visible to anyone on the internet.
- 4. Portfolios should be manageable for students and faculty. Start small and build, focusing one or two competencies at a time if needed. Do in-depth sampling and analysis of a random sample of students, particularly if you have a large student body.
- 5. Be sure that the electronic system allows you to see student progress over time. The department of Family and Consumer Sciences at the University of Wyoming abandoned their portfolio project because at that time the platform used by the University would not allow tracking achievement over time, therefore not yielding the kind of usable data to make curricular changes.
- 6. Choose competencies that show how your curriculum directly contributes to the student outcomes. It's fine to use some competencies that are part of your institution's general education program (we all want competent writers and critical thinkers), but be sure that some directly relate to the major.

References

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