Planning Portfolios: Authentic Assessment for Library Professionals

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Portfolios provide authentic measures that give a vivid picture of a person or program. The final product is unique to the creator and the institution that assigns it. In preparation for implementing portfolio assessment in the Master of Library Science program at a regional university, a careful review of schools requiring portfolios was conducted to identify commonalities among programs. Analysis of documents available at Web sites were carefully examined for the following characteristics: portfolio required or optional; required reflective writings; artifacts aligned with state and national standards; artifacts aligned with program objectives; evaluation rubrics provided; evaluation by reviewing committee; periodic review with an advisor; and statement of main goal or purpose for the portfolio. Following this review, it was determined that at least fourteen ALA accredited programs use portfolio assessment for evaluation of student performance in their library program of studies, the majority of which are in school library media. The common characteristics include: artifacts aligned with state and national standards, required written reflections, and faculty advisors to mentor students through the process. Following the first year of portfolio assessment in our program, we have concluded that the continual process of self examination, comparison to standards, and personal assessment of student products provided rich learning experiences aligned with program goals and objectives.

Research in learning and cognition provides ample evidence to support the need for students, at all levels and disciplines, to relate new concepts and skills to personal life situations. If methods of teaching are authentic, then it is reasonable to expect authenticity in evaluation of outcomes. Portfolios for assessment of student outcomes, as well as program evaluation (Gredler 1995), provide authentic measures that give a vivid picture of a person or program. The final product is unique to the creator and the institution that assigns it. In addition, the portfolio provides tools for learning and self evaluation. The student must continually assess his or her progress using national, state, and institutional standards for excellence. The student is constantly collecting and justifying the selection of evidence in support of his or her learning. Benchmarks, rather than pop quizzes, provide the incentive for engaging in the learning process, thus development of appropriate criteria for evaluation should be the first step in the authentic assessment of learning.

Review of the Literature

Portfolios in Other Professions

Many professions have embraced the authentic measure of assessment. In medicine, assessment focuses on performance and abilities as applied to the field of practice. Routledge and Wilson (1997) report plans for medical students to keep a learning diary in which they will record critical incidents, reflection on these experiences, bibliographies of learning resources, and projections for professional growth related to future medical practice. In Great Britain, the National Council for Vocational Qualifications (Wolf 1998) has foundational requirements for combining theories of learning with competencies for certification. The portfolios are criterion referenced with an emphasis on outcomes of student learning. Portfolio requirements include, "authentic reflections of workplace practice, and should also be highly standardized so that any employer knew exactly what a parwhat a pan(a)4(n20.004 Tc 0.0-8(f)5(v- 28ios T* [(prf)5(v- (ticdl)-2(C o requi   mv(t)-2(h am)-12(e)4(nt)-2(ua)4(-6 r)3(e)4re. F1997-2(b-2(e)(o r), J T* -28.r)3(m)-2(a)4(nr)3

rationale for selection of each artifact as evidence must be included. Assessors examine how well the candidate relates theory to practice in the written reflections.

Professional support personnel are not always evaluated with reliable assessment instruments. School counselors, psychologists, curriculum specialists, and school library media specialists are evaluated with the same appraisal instruments as the classroom teacher. For professionals on the periphery of the classroom, administration of a program, service to other teachers, and the outreach to the commueflch-(8.57 12(he)4(20(not)-2([e2 Tw [(w)4(ith r)7t)-2(4(ounr4(d))-7(og)10(r)-

purpose (evaluation, job seeking, document professional growth), the audience (program faculty, school principal), evidence (documents, multimedia, Web sites), and reflections (rationale for artifact selection, alignment with standards). Most professional portfolios also include a statement of professional philosophy (Murray 1997; Nettles and Petrick 1995). One's personal philosophy is rooted in deeply held convictions, thus documents supporting those beliefs should be consistent throughout the portfolio.

Format for the Portfolio

Portfolios may be organized within a three-ring binder, burned to a CD-ROM, or published as an HTML file to a Web server. Wilcox and Tomei (1999) developed a model using two formats—the smart portfolio which contains a collection of artifacts in both paper and electronic format and the intelligent portfolio, a digital format that makes the best use of file directories and software with linking capabilities (61).

Electronic portfolios have all the advantages of traditional paper portfolios with the added enhancements of portability, storability, and more flexible creativity on the part of the creator. Barrett (2000) developed a model with five stages in the electronic portfolio development process: (1) defining the portfolio context and goals; (2) collection of artifacts and archiving them in electronic folders for each standard; (3) review of reflective statements written for each artifact and elaborating on the purposes for inclusion; (4) conversion of all artifacts to either PDF or HTML files with linked goal statements, work samples, rubrics, and reflections. One distinct advantage for the e-portfolio is presentation in one or more media before an audience (usually the reviewing committee).

Assessment of Portfolios

Traditional assessment methods are usually isolated events that measure students' mastery of concepts and skills at specific points along an instructional timeline. These events could be few in number, randomly administered, or occur as a solitary culminating examination. Authentic assessment differs in both the timing of administration and method for scoring of student responses. Instead of testing students at discrete, isolated points, assessment occurs in sync with students' learning experiences. In addition to timing, students have some freedom to select a product that best represents what is considered a correct answer. Because standards and objectives are clearly part of the instructional program, students have multiple opportunities for reaching mastery of a particular skill or concept. As part of the formative assessment of student products, checkpoints allow students to reflect on how closely their performance matches the

pencil test that would be a reliable measure of competence for this type of skill. Thus, indicators should be assigned to each level of competence for a valid measure of the student's performance.

Another important consideration when designing the rubric is determining the number and designation of scales (Koch and Schwartz-Petterson 2000). When using one to three levels for each category, self-evaluation becomes more restrictive and lacks the precision that is afforded with five or more levels of performance. If the rubric is constructed to include five to six levels, the assessor's job is more difficult because of added details needed to analyze each artifact. When using five levels, there is the danger of the assessor's overuse of scoring within the "safe three" or-g-2(ve)4(o3Sd)-11(c)4(o)-101a37271(s)-15(ct)-6(i(be)-4(caus)[(i)-t)-20(a)5i(b4(i(vs)[(l)-55a

	librarian sponsors, etc.		
Emporia	Reflecting essay: artifacts represent achievement of program goals.	Digital format stored on disk.	Endorsement by certifying committee 1 hour credit course required
Indiana University	For PhD. candidates in Library and Information Science: Table of Contents with professional goals Sample products with annotations Summary of portfolio with plans for reaching future goals	Print format, audio/visual, video, or electronic J 0.002 Tw T* [M2hT4619.96 13,9.96 13,9.96 13,9.96 13,9.96 13,9.96 anno po9-8(s)-8(iMaTw T* [M2h /TTx>>BD w 12 hopl)3(a)-12(ns)4	

assessment committee. In all programs examined, it was the student's responsibility to notify his or her advisor within the first few weeks of the semester or quarter in which the portfolio was to be submitted for evaluation.

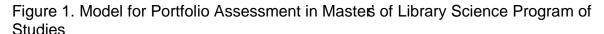## Outcomes from Portfolio Development Course

Fourteen students enrolled in LIBS 6903 Portfolio Development. This special topics course included a culmination project with digital portfolios published to a university server. Using a variety of software, students completed at least three pages for their Web site with a minimum of one artifact linked to a reflective writing piece. Students learned the process for portfolio development and the use of file transfer protocol (FTP) software available for free download from our university. Many of the students gained skills in the use of the portable documents file (PDF) and became proficient in uploading and developing the links for their final product. The course (included in the related links section) was developed as a combination online- and face-to-face method for delivery. Since many of our students live long distances from our rural campus, a hybrid of Web-based and on-campus meetings was needed to provide laboratory experiences in the use of the hardware and software. Students were highly motivated to use the lab facilities, even those with a higher level of technical expertise. Since most of the discussions were related to the reflective writings, students seemed to benefit from face-to-face interaction. Several of the students were familiar with PBL and the reflective writing process, but needed to see samples of how artifacts are selected, aligned with a particular standard, justified for selection, and reflective writings on how a product might be revised or enhanced.

Conclusions and Recommendations

Reflections and Rationales

Many of the universities that utilize portfolios required some degree of written reflection accompanying individual artifacts. The reflective writing process has been implemented in many teacher education programs and is a pivotal component for projects required in PBL for initially licensed teachers (Bradshaw and Hawk 2001). Based on these practices in teacher training, it seems reasonable that those seeking licensure in school library media must also recognize the importance of documenting strategies for teaching information literacy. In addition, it would be important for the librarian to articulate how the library program impacts learning. This would be a first step in overcoming the apathy, revealed in earlier studies, that the librarian has no need for portfolios. Following the piloted project for portfolio implementation, students began, without prompting, to write reflectively about major assignments and projects within core courses. It became a natural part of their coursework and contributed greatly to making connections between university classroom and the workplace. A typical comment from students was, "for the first time, I am seeing how (theoretical) course assignments can be applied to my classroom experiences at school (or the library)."

The reflections and rationales may not always focus on standards or outcomes. Candidates should also reflect on their own professional progress. Similar to journaling, students begin to adopt attitudes for personal accountability and habits for lifelong learning. Reflections on professional goals and progress are also useful for documenting growth over time. Clear indicators for program effectiveness are student-generated products that show mastery of skills and growth in knowledge. These products are a natural outcome when using portfolio

Figure 1. Model for Portfolio Assessment in Masters of Library Science Program of Studies

Early in their program, as part of introductory course in library science, students use HTML files to create and publish template for their portfolio that includes:

- x Table of contents
- x Resume
- x Professional philosophy
- x Matrix with program standards

Students may have some technical difficulties, but mastery of skills for file transfer and webpage development are better mastered early in their program. Students also begin the process for selection of artifacts while thinking and writing reflectively.

Using course syllabi, faculty identified specific assignments and projects that should be included as artifacts in the final portfolio. Careful consideration was given to selection of course projects that meet program and university accreditation standards. Thus, student accountability is aligned with program accountability.

Students may write informal reflections after completing assignments. Ongoing feedback from the course instructors helps provide mentoring needed during portfolio development process. An optional portfolio development course is available for students needing additional mentoring and help with technology. Nearing completion of their program of studies, students may register for one hour independent study with faculty. This provides additional mentoring to ensure students make the connection between course assignments, their own professional goals, and artifacts developed throughout their program of studies. Built into the independent study is evaluation of

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Related Online Links

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