Creation of electronic portfolios in an educational leadership cohort

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Abstract:

According to a study conducted by the American Association of Colleges of Teacher Education (2002), approximately 90% of universities and colleges of education use portfolios regarding student assessment. Forty percent of universities use electronic portfolios in teacher certification programs for licensing. Because of the popular use of electronic portfolios (e-portfolios) as a major assessment instrument in education programs, particularly educational leadership programs, a need exist to look at the effectiveness, validity, and reliability of e-portfolios. Educational Leadership Programs at Mississippi State University-Meridian currently uses taskstream software (taskstream.com) as a means to collect data and create student electronic portfolios.   This presentation will look at the effectiveness of electronic portfolios and taskstream software and will address the following themes: (1) A review of requirements for electronic portfolio implementation, (2) the benefits of electronic portfolios, (3) models/ template designs and the use of rubrics for research assignments in taskstream software, (4) reflections of Mississippi State University-Meridian Educational Leadership (EDL) students on technology integration, and (5) serving purpose of Electronic Portfolios for student and program data collection.

INTRODUCTION

In assessing student progress, the use of electronic portfolios has become a part of many educational leadership programs throughout the country. Habib and Wittek (2007) explained, "New modes of assessments are being tried at all levels of the educational systems, and portfolio assessment is one example of an assessment practice that is becoming increasing popular in higher education" (p. 266). Portfolio assessments measure what students and teachers know and are able to do. The potential for improving practice by enhancing an educational leadership students' ability to reflect while assuming more responsibility from an electronic self-paced point of view such as e-portfolios has been widely discussed (Anderson & DeMeulle, 1998; Bartel, Kaye & Morin, 1998; Wolfe & Dietz, 1998; Barton & Colllins, 1993). E-Portfolios are used throughout many educational leadership programs as formative assessments and as a final evaluation of student performance. E-Portfolios can also serve as an excellent source of graduate program documentation or a tool of demonstration for prospective employers or current supervisors. Since January 2005, Mississippi State University-Meridian (MSU-M) has utilized e-portfolios as a way for demonstrating performance in classes and in field experiences (internships) in elementary education, secondary education, and educational leadership programs. In the Educational Leadership Program at MSU-M, expectations for candidate portfolios have slowly evolved from a trial electronic tool to one that is used for final assessments of performance outcomes. In addition to serving as a means for addressing candidate performance in our program, e-portfolios are also used in the collection of program data for the National Council for Teacher Education Programs (NCATE).

Mississippi State University-Meridian, a small upper-level undergraduate and graduate university, sits directly across the street from Meridian Community College. MSU-M has approximately 1,000 students, 20 of which are in the Educational Leadership Program. Meridian Community College has approximately 4,600 students. Mississippi State University-Meridian is a branch campus of Mississippi State University. Mississippi State University is located in Starkville, MS, and has approximately 17,000 students. The Educational Leadership Program faculty at Mississippi State University-Meridian works collaboratively with the Educational Leadership Program faculty at the main campus. The city of Meridian, MS, has approximately 40,000 people and over 100,000 in the county (U.S. Census Bureau, 2009).

ELECTRONIC PORTFOLIO IMPLEMENTATION

Students in the Educational Leadership Program at MSU-M benefit from e-portfolios. In addition to serving as documentation of research activities during the program, the e-portfolio is a flexible and valuable tool. E-portfolios can be printed from any computer at any time. This gives the student easy access to their research. Over ten years ago, Danielson and Abrutyn (1997) laid out the following process for implementing e-portfolio assessments which is part of the implementation process at MSU-M:

- Collection: Students learn to save artifacts that represent the successes and growth opportunities during their course rotations.
- Selection: Students review and evaluate the artifacts they have saved, and identify those that demonstrate achievement of specific standards.

- Reflection: Students become reflective practitioners, evaluating their growth over time and their achievement of specific standards.
- Projection: Students compare their reflections to the standards and performance indicators, and set learning goals for the future. This is the stage that transforms e-portfolio development into professional development and supports lifelong learning.
- Presentation: Students share their e-portfolios with their peers. At this stage, appropriate public commitments are made to encourage collaboration and commitment to professional development and lifelong learning.

While most people would view the creation of e-portfolios as something that is overwhelming, using taskstream software makes this process very simple. Research assignments are assigned at each of the core EDL courses at MSU-M and over the course of the program, saved as a part of the students' electronic portfolio. The electronic portfolio could also be called a research portfolio. A generic instructional systems design model can be used in the development process for programs planning to use e-portfolios (Ivers & Barron, 1998):

- Assess/Decide: Conduct a needs assessment of the audience, the presentation goals, and the appropriate tools for the final e-portfolio presentation.
- Design/Plan: Organize or design the presentation; determine audience-appropriate content, software, storage, and presentation sequence; and, construct flow charts or write storyboards.
- Develop: Gather materials to include in the presentation and organize them into a sequence for the best presentation of the material, using an appropriate multimedia authoring program.
- Implement: Present the e-portfolio in the intended audience.
- Evaluate: Evaluate the presentation's effectiveness in light of its purpose and the assessment context. Use rubrics created by EDL faculty to assess student work.

In January 2005, the Educational Leadership Programs at Mississippi State University and Mississippi State University-Meridian made the change from paper-based research portfolios to electronic-based research portfolios. Two benefits of this change were that students would be able to include multi-media exhibits and make the portfolio a more portable one. Some of the benefits of electronic portfolios are sited in recent research (Ascherman, 1999; Barrett, 2000; Boulware & Holt, 1998; Goldsby & Fazal, 2000; Weidmer, 1998). These benefits include:

- Electronic portfolios allow for the use of multimedia artifacts.
- Candidates can use hyperlinks to make direct connections from the standards to portfolio artifacts.
- Candidates are able to show actual teaching episodes and provide annual teacher-student interactions for evaluators. (professors choice)
- E-Portfolios are easily distributed by burning multiple copies on CD or by publishing on the web.
- Programs are able to assess a variety of technology skills that candidates must use in the creation for their portfolios.
- Prospective employers can be introduced to a candidate's technology skills as they review the e-portfolios.

- Teachers who create e-portfolios are more likely to infuse technology in their classrooms and require their own students to develop e-portfolios and projects.

RUBRICS

Using the Rubrics, professors must assign grades in each EDL class and by the end of the candidates' program, the e-portfolio will be formed. Revisions of assignments can be made if the professor chooses. Typically (depending on professor), students at MSU-M have adequate instructional opportunities to succeed in meeting the requirements of the e-portfolio and to remediate when performance is inadequate. Rubrics reflect leadership skills and are created in accordance with the six ISLLC standards (Interstate School Leaders Licensure Consortium) . Rubrics for assignments reflect the knowledge and skills demonstrated to be essential for this program. They must represent important job-related behaviors and be authentic representations of the work that the students will do in the workplace.

REFLECTIONS OF ELECTRONIC PORTFOLIOS/TASKSTREAM SOFTWARE BY MSU-MERIDIAN EDL STUDENTS

Students in the 2007 EDL Cohort at MSU-M were surveyed (*n*= 12) on the use of taskstream software into our EDL program. Students were asked to comment on the use of technology into our EDL classes. The following are reflections of student views on e-portfolios in taskstream software:

- "Being forced to use electronic portfolios improves my technological skills by providing technological hands-on experiences. I understand technology better."
- "I entered the program knowing that there would be online integration. I wanted to learn more about technology. If the technology component was removed, I would see other classes that would give me that experience."
- "I prefer an EDL program that uses technology such as taskstream."
- "Taskstream is great! I enjoy the technology component."
- "All of our classes (non-EDL classes) should have taskstream."
- "Without the technology/ hybrid classes, I would not be able to continue my education at this point in my life."
- "I would look for another school if technology was removed from this program. Taskstream helps to improve my technological skills."
- "I did not have a choice in the matter, but taskstream has improved my technology skills."
- "Taskstream aids as a remediation technique in acquiring better technology skills."
- "I'm forced to use technology in this program, which is a good thing."
- "My skills really haven't changed because of this program."

The responses from the survey were a result of questions meant to yield reflections of educational leadership students about the use of taskstream software and e-portfolios in their program. Most of our students viewed technology integration and taskstream software as tools that increased their technology skills. Students did not comment specifically on e-portfolios.

PROGRAM PURPOSE OF ELECTRONIC PORTFOLIOS AT MSU-MERIDIAN

Quality assignments are necessary to build a worthwhile program. While e-portfolios can provide insight into a candidate's readiness for becoming a practitioner in the field, a more authentic assessment is needed than a candidate's ability to complete research assignments online and closely follow rubrics. On-site and university supervisors play a large role in witnessing leadership development. Graduates must be able to demonstrate both a solid familiarity of educational research as well as proven capacity to integrate the latest research findings into practice. An authentic assessment of student ability may contribute to a more rigorous evaluation of the program. A successful e-portfolio could provide a wealth of data for evaluation for the program itself, students' academic development, changes in effective uses of instructional technologies, and a diversity of experiences in the applications of those technologies.

E-Portfolios are not only used as a means of program documentation, but can be used as a form of data collection for accreditation agencies. NCATE (National Council for Accreditation of Teacher Education) assesses education programs based on standards and program documentation. The taskstream software provides proper documentation of student work for NCATE evaluators.

Portfolios continue to be topics of debate in higher education. E-portfolio assessment is prevalent throughout most areas of teacher education. E-portfolios at MSU-M are primarily used as a record of documented program research. But like all assessment instruments, the tests of validity, reliability, fairness, and absence of bias will need to stand the test of time. This requires an appraisal of their potential benefits and risks. The faculty at Mississippi State University-Meridian and Mississippi State University (main campus) will continue to study e-portfolios as an assessment of program research.

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