

E-Portfolio Assessment of School Leaders' Evaluation and Technology Competencies

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Purpose

In the age of accountability, school administrators must be well grounded in the practice of program design and evaluation practices. A graduate school of education developed an electronic portfolio system to assess Master of School Administration (MSA) candidates' competencies in using technology to conduct educational program evaluations. The electronic portfolio facilitates the alignment of evaluation and technology standards with performance competencies in a program design and evaluation course. Students build their electronic portfolios for use in presentations and as a resource for sharing information with instructors, colleagues, and potential employers.

The Joint Commission's Standards (1994), the Interstate Licensure Consortium Standards for School Leaders (1996) and the Technology Standards for School Administrators (2001) are an integral part of this assessment process. Students develop work products to demonstrate their understanding of these standards and their ability to use web-based technologies to design and implement educational program evaluations. This paper discusses the process of integrating these standards and subsequent competencies into the school administration program within the context of a summative electronic portfolio assessment model.

The No Child Left Behind Act has established the evaluation of instructional programs and student achievement outcomes as most important measures for determining success in public schools. School administrators must understand how to use evaluation theories and practices to promote effective decision making in the selection and assessment of academic programs. This is no longer an option for school leaders; it is a mandate.

Theoretical Framework

A program design and evaluation course in the MSA course of study provides opportunities for future educational leaders to learn a variety of approaches for designing, planning, and conducting educational program evaluations. The general goals of the course are to develop an awareness of the concepts and issues in educational program evaluation, to gain a clear perspective of the role of evaluation in education, and to acquire the skills and ability to effectively use technology to conduct program evaluations. The course supports development of educators as effective decision makers and reflective practitioners and is aligned with the components of the Interstate School

Leaders Licensure Consortium Standards (1996). Students receive instruction on the content knowledge required to create program designs, to conduct program evaluations, and to interpret the results of program evaluations. Students also develop effective strategies for presenting and communicating program evaluation results to diverse stakeholder groups.

Educational leaders must have the knowledge and ability to use technology in their administrative planning and practices. The e-portfolio system provides a means for assessing students' evaluation and technology competencies, provides training on how to use technology to support effective leadership practices, and provides an array of content knowledge and techniques to assist educational leaders in assessing student achievement programs in public schools.

The specific goals and objectives of the program design and evaluation course include: 1) understanding the importance of program evaluation in education; 2) understanding the standards for conducting ethical and professional program evaluation; 3) being knowledgeable of program evaluation practices; 4) understanding the linkages between research and program evaluation; 5) recognizing and taking into account gender, race, ethnicity, and social class as salient factors related to educational program evaluation outcomes; 6) understanding how to identify, collect, critically analyze, and utilize information provided by conducting program evaluations in educational environments; 7) understanding the importance of using a variety of communication channels and strategies to reach all the diverse stakeholder groups found in public schools; 8) understanding how to link all of these foregoing factors with positive student learning and successful school improvement efforts.

Sacks (1996) proclaimed that the new role of the educator in postmodern society should be recognized as having several different tasks, including the guiding of students in the use of information-gathering and digital assessment tools. The program design and evaluation course was selected to find ways to meaningfully integrate the web-based communication and collaboration tools to address these aims. Five primary goals were identified: 1) incorporate the development of a student electronic portfolio into the program design and evaluation course; 2) provide instructional and curricular opportunities that promote collaboration and communication; 3) provide students with communication and collaboration tools analogous to the communication and collaboration tools they use in their personal lives; 4) determine if the students receive a level of satisfaction from using the technology; 5) assess the impact of integrating technology into the course on students' evaluation and technology competencies.

The electronic portfolio is a collection of work captured by electronic means which serves as an exhibit of an individual student's efforts, progress, and achievements in one or more areas. Due to rapid growth and updates in technology, maintaining electronic portfolios is becoming increasingly common in a variety of educational settings (Capraro, 2003). There is growing evidence that portfolio assessment is a valid measure of skill and concept attainment, and a reliable model for predicting student achievement following graduation (Brown, 2004). Portfolios serve a variety of needs: presentation, developmental (also known as learning/working), resource management, and communications.

Program evaluation projects and electronic portfolios support the development of work products to assess students' achievement and understanding of evaluation standards, principles, methods, and practices, and promote the use of digital and web-based technologies. The program design and evaluation course provides opportunities for students to analyze student achievement and to identify effective educational indicators in

public schools. The learning activities guide students in developing a six step program intervention and evaluation process based on the American Evaluation Association's Standards and Guiding Principles (AEA, 2006). A mid-term needs assessment and final exam program design plan are used to assess students' competencies in analyzing school environments, selecting intervention programs, and evaluating summative outcome measures.

The electronic portfolio provides a vehicle for students and professors to formatively and summatively review work products in the course. By adopting this tool, students can post their work products in the e-portfolio for review by the professor and each other. This process infuses technology into the course and stimulates communication among students and professors in an online format. For this course, MSA students are asked to upload artifacts and work products they created into their electronic portfolio. After students have completed all documents required for the course, they are asked to develop a presentation portfolio. A presentation portfolio is a professional and personalized collection of work products which highlights the student's knowledge, skills, and abilities. The e-portfolio is aligned with a rubric which is used to assess students' evaluation and technology competencies (see Appendix).

Method

The e-portfolio assessment system was implemented in 2005 and was used to evaluate 50 MSA students' evaluation and technology competencies. All of the students were enrolled in a program design and evaluation course which is required for MSA candidates in the school of education. All students were employed in public schools as teachers or assistant principals at the elementary, middle, or high school level...

Students developed a program design and evaluation plan based on the following outline: (1) define the program purpose; (2) select of an intervention program; (3) develop an evaluation description incorporating evaluation standards; and (4) identify the design, methodology, data collection and reporting plans. This is followed a description of how stakeholders will be identified and included in all program meetings and activities. The quality of students' work products in the course are evaluated using the rubric ratings of *Standard Not Met*, *Standard Met with Recommendations*, and *Standard Met*.

Data Sources

Student responses on the value and usefulness of the e-portfolio system were collected using qualitative interviews, surveys, discussion postings, emails, and verbal communications. Rubric ratings of work products and presentations provide benchmarks for determining students' achievement of evaluation and technology competencies. In addition, exit interviews were conducted with students after completing the e-portfolio process to collect their reflections on the assessment model.

Results and Conclusions

Eighty-five percent of the students provided positive responses to the e-portfolio system and the integration of technology into the program evaluation course. Seventy-eight percent of the students said that the e-portfolio more closely resembled the types of technologies that they use in their personal lives. Eighty-nine percent of students indicated that the web-based technologies created more opportunities for them to

communicate with their classmates and with the professor. Several students said the technologies helped establish a sense of community within the class. These students stated that the ability to instant message and email each other from one interface, while working within that same interface, was a very positive and helpful benefit. Sixty percent of the students noted that once they were logged into the website, the e-portfolio interface became a place where they could work on assembling their portfolios with easy access to class materials and resources.

Twenty percent of the students considered the final e-portfolio presentations to be “somewhat meaningless” after uploading their documents and completing their work products. Several of these students mentioned that they did not see the value in this requirement given their work product presentations in the regular class meetings. In their view, the e-portfolio was useful for organizing data, storing work products, and presenting to future employers, rather than “repeating” previous work product presentations.

The majority of student work products were above average to excellent quality. The work products demonstrated that students had a very good understanding of evaluation and technology standards. In addition, the work products revealed that the majority of student could effectively apply and use digital evaluation tools to assess school programs and services.

Student responses in exit interviews revealed substantive benefits from completing the digitally-based program evaluation course. Ninety-five percent of the students stated that the web-based work products would be valuable to them as school leaders. Several students indicated that their newly acquired skills would be very useful in planning and decision making. Eighty-percent of the students said they intended to share the web-based, program evaluation framework with teachers and administrators in their schools.

The literature recommends that school administrators should learn how to use technology whenever possible in assessing, evaluating, and communicating with school stakeholders (Dempsey, 1999). There is also a growing expectation for future school leaders to be able to use information and communication technologies to bridge the increasingly diverse cultural backgrounds among their stakeholders by developing shared goals, understanding, and support (Slenning, 2000). School leaders have a responsibility to utilize technology in evaluating programs and to ensure that other staff members understand the importance of using digital tools to assess the quality of instruction and support services (Kearsley & Lynch, 1992). The e-portfolio system provides a digital means for assessing future educational leaders’ competencies in understanding evaluation standards, principles, and practice. The development of the web-based assessment work products integrates evaluation standards and technology skills in a systemic learning module. This approach reinforces effective leadership practices and promotes outcome-based decision making.

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Appendix

Electronic Portfolio Assessment of Evaluation & Technology Standards Rubric				
STANDARDS	STANDARD NOT MET	STANDARD MET WITH RECOMMENDATIONS	STANDARD MET	RATING
1. Define Purpose & Identify Stakeholder Engagement Process	Purpose partially defined & stakeholder engagement process minimally identified	Purpose & stakeholder process adequately defined & identified	Purpose & stakeholder process comprehensively defined & identified	
2. Research Based Intervention Program	Validity & reliability inadequately described; program not clearly related to purpose, goals & objectives; minimal analysis and research	Validity & reliability adequately described & related to purpose, goals, & objectives; adequate analysis and research	Validity & reliability of intervention program clearly identified & directly related to purpose, goals, & objectives; critically analyzed	
3. Program Evaluation Standards	Some evaluation standards minimally incorporated into program design & evaluation	Evaluation standards adequately incorporated into program design & evaluation	All evaluation standards clearly identified, described, & incorporated into program design and evaluation	
4. Design, Methodology, Data Collection Plan, & Report Components	Some design, methodology, data collection, & report components identified & described	Design, methodology, data collection, & report components adequately identified & described	Design, methodology, data collection, & report components thoroughly identified, clearly described, & connected	
5. Technology Standards and Performance Indicators for School Administrators	Some use of technology to design program, collect & analyze data, interpret results, & communicate findings to improve instructional practice & student learning within electronic portfolio	Adequate application of technology to design program, collect & analyze data, interpret results, & communicate findings to improve instructional practice & student learning within electronic portfolio	Systemic & multiple uses of technology to support program evaluation standards & practices within the electronic portfolio	
Comments:				

