Organizing Instructional Practice Around the Assessment Portfolio: The Gains and Losses

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Abstract

This exploratory study describes a teacher educator's efforts to organize her instructional practice around an assessment portfolio mandated by the state and examines the effectiveness of such endeavor. Findings revealed that, when a link between teaching and the required assessment portfolio was created, students' self-efficacy and performance in compiling the portfolio substantially improved, the instructor's instructional practices were better organized, students' metacognitive awareness of learning process was heightened, the instrumental value of course assignments increased, and students' understanding of teaching and learning as reflective acts was reinforced. The article concludes with a suggestion that teacher education programs should make learning portfolios, not assessment portfolios, their first and second year students' first formal experience with portfolios to ensure a high level of student engagement in the process of portfolio development.

Introduction

In defining teaching portfolio, Wolf and Dietz (1998) proposed three distinct models: (1) *learning portfolio* (i.e., personalized collections of one's work that emphasize ownership and self-assessment), (2) *assessment portfolio* (i.e., selective collections of one's work submitted by teachers according to structured guidelines set by professional organizations, state agencies, or school district), and (3) *employment portfolio* (i.e., customized collections of information given by individuals to prospective employers for a specific professional position). The term used by Snyder, Lippincott and Bower (1998) for assessment portfolio was *credential portfolio*, a portfolio that responds to and is organized around externally defined licensure standards to prove that the candidate has demonstrated competence of state-defined teacher standards (p. 46).

According to Wolf and Dietz (1998), what distinguishes the learning portfolio from the assessment portfolio is their respective purposes and different emphases in terms of authorship and audience: with the purpose of promoting teachers' independent learning, the learning portfolio is authored and owned by the teacher, and the primary audience is the teacher him or herself, unlike the assessment portfolio whose primary purpose is to attain a formal assessment of teacher performance, and the main audience is the organization conducting the evaluation. While weighing the advantages and disadvantages of the two models, Wolf and Dietz (1998) pointed out that the learning portfolio was flexible and encouraged teacher autonomy over the process, but it may not be able to provide a broad picture of a teacher's competence and performance. Wolf and Dietz considered it a great advantage that the assessment portfolio is able to directly and explicitly present a comprehensive and standardized view of what a teacher knows, but they also pointed out that, in developing an assessment portfolio, "individual teacher learning goals can be sacrificed to some degree in order to achieve greater standardization, and [the assessment portfolio] can be artificial in nature" (p. 19). The similar concern was shared by Snyder et al. (1998) in their discussion of "credential portfolio." They believed that, starting with externally defined standards, credential portfolio tended to be a collection of artifacts that portray one's best work, thus "[superseding] the use of a portfolio as a workplace charting the growth of a teacher through open and honest reflections on the struggles and inevitable failures common to the learning process" (p. 46).

Though there has been extensive research on the

use of portfolio as an alternative assessment method (Davies & Willis, 2001; Harris & Arnold, 2001; Guillanume & Yopp, 1995; McLaughlin & Vogt, 1996; Mills & Reisetter, 1995; Scanlan & Heiden, 1996; Zidon, 1996), very little empirical research has been conducted to examine the use of portfolio as a guide to direct instructional practices and to investigate the role "assessment portfolio," or "credential portfolio," has played in the phase of decision making in teaching process. Fewer studies have focused on how teacher educators base their instructional practice on the mandated assessment portfolio.

This article describes an exploratory study in which the efforts to organize instructional practice around an assessment portfolio mandated by the state were documented, the effectiveness of such endeavor was examined, and the implications and suggestions were discussed.

Background

When portfolio assessment has been increasingly included as part of diverse evaluation of teacher candidates and programs in teacher education programs, (Copenhaver, Waggoner, Young, & James, 1997; Lyons, 1998; Wade & Yarbrough, 1996) as well as for accreditation at state and national levels (Synder, Lippincott, & Bower, 1998; Wolf & Dietz, 1998), the Department of Elementary and Secondary Education (DESE) in the state of Missouri mandated the implementation of the Missouri Standards for Teacher Education Programs (MoSTEP) which parallels the Interstate New Teacher Assessment and Support Consortium (INTASC) standards endorsed by the National Council for Accreditation of Teacher Education (NCATE). To document the successful attainment of these standards, students in our program are required to compile a portfolio beginning in their second year in the program (i.e., Block II) and continuing through the senior year (i.e., Block IV) and the student teaching experience.

There are ten Quality Indicators in MoSTEP standards, each having a number of Performance Indicators that provide benchmarks for three levels of attainment, namely, "Meets the Standard" (i.e., the teacher candidate not only has the knowledge base but also the ability to apply the knowledge in teaching), "Not Yet Meeting the Standard" (i.e., the

candidate may have the knowledge but is not yet able to apply that knowledge to teaching), and "Insufficient Evidence" (i.e., there is barely any evidence to support the candidate's meeting of that standard). The **required** portfolio consists of two parts: (a) artifacts selected by teacher candidates that serve as supporting evidence for meeting these standards, and (b) reflections in which teacher candidates rationalize their selection of a particular artifact to support meeting a particular standard. Expectations of preservice teachers to meet these Quality Indicators vary from Block to Block.

Problems observed. Helping my students compile the required assessment portfolio was an important task assigned to me as part of my teaching when I started teaching Block II in the fall of 2000. At the end of that semester, based on the data collected by way of a survey, direct observations and personal interactions with my students, I found that there was an overall passitivity in students' attitudes towards the portfolio, and quite a few students considered the portfolio an add-on to their already heavy coursework load and tight study schedule. I also observed evidence of anxiety and frustration among about one-third of the students throughout this initial compiling process. Those students demonstrated a degree of incompetence, and their portfolios were considered unacceptable by the departmental criteria at the end of Block II experience. One of the major problems observed was inappropriate selection of artifacts for the standards, and their reflections on the artifacts were irrelevant to the corresponding standards.

I attributed those students' lack of initiative in compiling the portfolios, their anxiety and frustration as well as the displayed incompetence in compiling the portfolio to the fact that there was no apparent link between the portfolio and the courses. The courses and portfolio were approached separately. To both my students and myself, the mandated portfolio was a task we had to complete in addition to our regular work, and the instrumental value of the portfolio was vague to the students as well.

Actions taken. In response to this perceived problem, I made some substantial changes in my teaching in the fall semester of 2001. Around the five

MoSTEP standards for portfolio developing required of Block II students, I reorganized the course contents and redesigned the course assignments. That is, I used these standards as the guidelines for my instructional decisions on course contents and assignments. Specifically,

1. I aligned the instructional contents with these five standards: "Knowledge of Subject Matter," "Knowledge of Human Development," "Motivation and Classroom Management," "Communication Skills," and "Professional Development."
2. I linked course assignments to the possible documentation of artifacts for the portfolio.

The first change resulted in the fact that I selected all the chapters in the textbooks that were *directly* related to those standards but deselected those that did not directly address those standards. With the second change, all the assignments I developed for those courses had the potential to become artifacts for the portfolio.

Research goals. My study was guided by the following questions:

1. Will students' self-efficacy as well as their overall performance in developing the portfolio increase as a result of the implemented changes?
2. Will students' attitudes towards portfolio become more positive as a result of the implemented changes?
3. What, if any, benefits and/or disadvantages are to be gained by organizing instructional practice around the assessment portfolio?

Method

The study was conducted in my own classroom with two groups of Block II students, one from the fall semester of 2000 when my teaching was not connected to the mandated assessment portfolio, and one from the fall semester of 2001 when I organized my teaching around the portfolio. All of my students (16 from Fall 2000 and 21 from Fall 2001)

participated in the study. The student demographic information is illustrated in Table 1. The data showed that students' previous experience with portfolio was limited. For those who indicated that they had some prior experience with portfolio, their experience all came exclusively from one particular course they had taken before, and it was clear that none of the students had involved in any type of assessment portfolio before.

The principal means of data collection were a survey and students' grades. The surveys administered to the two groups were identical in content and format. To achieve reliability and validity, the survey was tested in two Block II sections before its use in my class. The survey contained 13 items, primarily investigating the change of students' attitude toward the portfolio and their self-efficacy in compiling the portfolio as a function of the implemented changes in my instructional practice. Students' attitude towards the portfolio was assessed through five constructs: (1) their perception of the usefulness of portfolios (usefulness), (2) their perception of the importance of developing the portfolio (importance), (3) their preference between portfolios and traditional assessment methods (preference), (4) their indicated intention to use portfolio assessment in their future teaching (future use), and (5) their expressed level of personal liking for developing a portfolio. Students' self-efficacy in compiling the portfolio was obtained through their self-ranking on a scale ranging from 1 to 5 (1 = not confident at all, 5 = very confident). Students' expected grade for the portfolio at the end of the semester was originally used as another construct for assessing student's self-efficacy but was dropped later because the feedback obtained from the pilot studies conducted in the other two Block II sections showed that students' expressed expected grades were more a wishful thinking than an accurate reflection of their confidence level in compiling the portfolio.

The surveys were administered and collected at the end of the fall semesters of 2000 and 2001 respectively when students were ready to submit their completed portfolios. Some of the items on the survey are cited in Table 2.

Table 1
Student Demographic Information

Category	Class of Fall 2000 (N = 16)	Class of Fall 2001 (N = 21)
Major		
Elementary	11	12
Early childhood	3	6
Special Education	2	3
Gender		
Female	16	17
Male	0	4
Level of Study		
Sophomore	9	13
Junior	6	6
Senior	1	2
Previous Experience with Portfolio		
A lot	0	0
Some	2	5
None	5	6
Unknown	1	3

Table 2
Major Variables on Survey

Variables	Items on Survey
Students' Attitude toward Portfolio	Is learning to develop a portfolio a useful and beneficial experience for you? (usefulness)
	How important is it for you to compose a portfolio? (importance)
	Is portfolio a more effective assessment method than traditional assessment methods? (preference)
	Are you going to use portfolio with your own students in your future teaching? (future use)
	How much do you like developing a portfolio as part of your learning experience in Block II? (liking level)
Students' Self-efficacy in Compiling the Portfolio	Indicate the level of confidence you have in developing a portfolio now. (confidence level)

Results

The results regarding students' attitude toward the portfolio, and their perceived self-confidence in compiling the portfolio are summarized in Table 3.

Table 3

Results Regarding Students' Attitude to Portfolio and Self-Confidence in Portfolio Compiling

Components		Survey 1 (Fall 2000) (N = 16)	Survey 2 (Fall 2001) (N = 21)
Attitude Toward Portfolio			
1. Usefulness	Yes	76%	76%
	No	10%	19%
	Unsure	14%	5%
2. Importance			
(5 = very important; 1=not important at all)	5	38%	43%
	4	24%	19%
	3	19%	28%
	2	19%	5%
	1	0%	5%
3. Preference			
	Yes	57%	52%
	No	5%	29%
	Unsure	38%	19%
4. Future Use			
	Yes	67%	47%
	No	14%	47%
	Unsure	19%	6%
5. Liking Level			
(5 = like it very much;	5	5%	5%
1 = not like it very much)	4	24%	38%
	3	48%	33%
	2	9%	19%
	1	5%	5%
	Unsure	9%	0%
Self-efficacy in Portfolio Compiling			
(5=very confident; 1=not confident at all)	5	0%	19%
	4	14%	19%
	3	14%	52%
	2	53%	10%
	1	19%	0%

Students' Attitude Toward the Portfolio

The results of students' perceptions of the usefulness and importance of portfolio show two similarities in both surveys: (a) there were more students who believed that portfolio was useful and important than those who thought it was not, (b) only a few students claimed that they liked portfolio very much as an assessment method while the majority fell in the range between "like" and "relatively like it." A closer examination of the results reveals two differences observed from the two surveys: (a) there were noticeably more students in the 2000 Survey than in the 2001 Survey that checked "unsure" in their responses to the survey questions, (b) there were noticeably more students in the 2001 Survey than in the 2000 Survey that indicated that they would not use portfolio with their own students in their future teaching. Accordingly, the overall results seem to have suggested: (1) intellectually, students of 2001 acknowledged the importance and usefulness of the portfolio, but at the personal level, they did not like it, (2) students of 2001 were more sure or certain than those of 2000 about their own opinions about portfolio.

Students' Self-efficacy in Compiling the Portfolio

The results of students' self-efficacy in compiling the portfolio show that students' overall self-efficacy level increased significantly in Fall 2001: while no one claimed to be "very confident" in the 2000 Survey, the percentage jumped to 19% in the 2001 Survey; while 72% of the students in the 2000 Survey felt "not confident" or "no confidence at all," the percentage dropped to 10 % in 2001 Survey.

Students Outcome Performance

The most eye-catching evidence found in this study is the improvement of students' performance in developing the portfolio. The students' end-of-semester grades show that, in the fall of 2000, only 64% of the class met the departmental criteria and passed the portfolio, but in the fall of 2001, 100% of the class passed.

Discussion

The study was initiated out of my concern about my students' struggle with their portfolios. My attempts to help them go through the process led me to using the portfolio standards as the guidelines for my instructional decisions. By organizing my instructional practice around the assessment portfolio, I witnessed the following observations. I consider these observations as the answer to the third question in my Research Goals.

1. *Increased student self-efficacy and performance in developing the portfolio.* The most obvious and notable evidence showing the benefits of organizing instructional practice around the portfolio came from the significant increase in students' self-efficacy and their overall performance in compiling the portfolio. Teaching to the portfolio made it possible for me to spend significantly more time in 2001 than in 2000 on the portfolio. This increased amount of time enabled me to provide my students with more scaffolding in their portfolio development process. I believe this increased level of instructional support played an important role in improving students' self-efficacy and performance in constructing their portfolios.

2. *Increased student understanding of portfolio.* The data have clearly shown that students of Fall 2001 appeared more certain than the students of Fall 2000 about their own perceptions, or beliefs, about portfolio when responding to those survey questions regarding their attitude toward portfolio. This could suggest that teaching to the mandated portfolio has helped the students better understand the notion of portfolio, and helped them formulate some personal opinions about portfolio. Furthermore, course assignments that were developed around the standards also seem to have helped the students comprehend the standards which tend to be complex and condensed in content and wording, because none of the students in Fall 2001 was found to have made inappropriate selection of artifacts for the required standards. However, selecting artifacts that did not match the portfolio standard used to be one of the major weak areas commonly found in many of the portfolios composed by the students of Fall 2000.

3. *Better organization of instructional practices.* My

teaching was better organized than before. As an instructor, I had the academic freedom to select the textbook chapters to cover for each course I taught. This had always presented itself as a challenge to me. I was not certain if the decisions I made were well founded. With the portfolio evaluation benchmarks at hand, and when the course content decision was made on the basis of the MoSTEP standards, I felt an increased confidence in my own choices of the course contents, and I felt more certain than before that those decisions were professionally validated and administratively supported. As a result of this change, I also felt that the courses I taught were more thematically related to each other. For example, in following the standard of "Knowledge of Human Development," I consciously selected the chapters that were related to the theme of "Development," such as theories of cognitive development (e.g., Piaget's, Vygotsky's), theory of psychosocial development (e.g., Erikson's), theories of moral development (e.g., Kolhberg's, Piaget's, and Gilligan's), and theory of language development (e.g., Chomsky's and Skinner's). In order to follow the standard of "Professional Development" which requires reflective quality of preservice teachers, I deliberately created a theme of "reflection" among my assignments to my students. For one course, I asked them to complete an Observation Web in which they observed and then reflected on what and how their cooperating teachers taught in the classroom (e.g., teaching styles, teacher-student interactions, reward systems, classroom management strategies, etc.). In another course, I asked them to write a Literacy Autobiography in which they identified and reflected on those environmental factors that contributed to the way they read and write today. For another course, I asked them to observe and reflect on how their peers taught in a simulated teaching situation. My goal was to engage my students in the reflective practice, reflecting on their own learning and teaching practices as well as others', including those of their cooperating teachers, their peers, and the experts discussed in the textbooks.

4. *Heightened metacognitive awareness of the learning process.* When a link among curriculum, instruction, and portfolio assessment was created, the portfolio compiling process was situated in a specific and immediate teaching and learning context. My students of Fall 2001 were able to chart what was being taught and learned in the coursework against the state mandated credential standards and see how they fitted into the big picture of the teacher education, and thus the "development of coherence, connection, and linkage of theory and practice in guiding students toward meaningful synthesis of coursework" (Mills & Reisetter, 1995) was facilitated, and as a result, their learning became more conscious. As one student responded in Survey 2, "Now I understand why I learned certain subjects," and another student stated, "(I now) understand what I have done and why."

5. *Increased instrumental value of the course assignments.* When the course assignments were designed in a way that would qualify them for the portfolio artifact candidates, students were more motivated to strive for quality work for each assignment. The instrumental aspect of the course assignments became obvious to students who were well aware that each of those assignments they were working on could be selected later as their portfolio artifacts and what they were doing could be part of their portfolio.

6. *Reinforced understanding of teaching and learning as reflective acts.* With the implemented changes, my students were "pushed" to see teaching as a reflective act. When they strived to meet the standards, they must be reflective: when they were engaged in the process of making decision as to what to include in the portfolio, and which assignment could best represent their learning, they reflected; when they wrote the reflections to justify their selection of a particular assignment as the artifact, they also reflected.

7. *More negativity in students' attitude toward portfolio.* Before the study I believed that by teaching to the mandated portfolio I would be able to help my students assume a more positive attitude toward portfolio. However, such out-come was not found from the results of this study.

Instead, students seemed to become more negative when they seemed to know more about what a portfolio was with their first-hand experience with portfolio and when their level of self-confidence in compiling the portfolio substantially increased. Several students claimed in 2001 Survey that they would not use portfolio with their own students in the future, and some doubted the effectiveness of portfolio as a more effective assessment tool when compared to the traditional assessment methods. They explained that the portfolio was very important to them just "because it is required," and "it is necessary to graduate;" otherwise, they didn't consider it important. Some students expressed their doubt about the benefits the portfolio could bring them. One of them mentioned: "I have spoken with principals who say they never look at them (portfolios) during (job) interviews." The other one complained: "I feel like I'm only concentrating (on) a few set (of) ideas and I'm working just to fill a point." Many students put "over 40–50" when asked how many hours they spent on their portfolio and complained that the whole process was too time-consuming.

Conclusion

The observed negativity in students' attitude towards portfolio seems to have lent some supporting evidence for the limitations of the assessment portfolio as already identified by Wolf and Dietz (1998). Among the three portfolio models proposed by Wolf and Dietz (1998), the learning portfolio is much more likely than the assessment portfolio to trigger students' interest and stimulate their motivation in the compiling process due to its promotion of students' self-exploration, self-reflection and autonomy over the process. For the assessment portfolio, restricted by its emphasis on evaluation, accountability and responsiveness to the externally defined standards (e.g., MoSTEP standards), students' individual learning goals are de-emphasized, and, in compiling a portfolio of this type, students' creativity is limited, and their ownership of their work is inhibited (Snyder, et al., 1998). Thus, some negative feelings generated from the process should not be a completely unanticipated outcome.

I believe that this disturbing finding has at least cautioned us against one important issue: the appropriate timing for assessment portfolios to be imposed on preservice teachers. This study has convinced me that preservice teachers should start with a learning portfolio, not an assessment portfolio. The learning portfolio permits students' authority for making decision on their portfolios' structure, content and process (Wolf & Dietz, 1998), thus their creativity and initiatives are encouraged. Besides, since the student is the primary audience of his/her own learning portfolio, the compiling process is much less stressful than that of the assessment portfolio. For preservice teachers who are at their initial stages of learning to teach, such encouragement as well as stress-free context to learn about portfolio as an effective assessment tool is of critical importance. Among the students who participated in the study, none of them had had any experience with assessment portfolio before, and their previous exposure to any other kind of portfolio was minimal as well. This portfolio experience in Block II was their first formal encounter with portfolio, and the first impressions obtained from this experience could color their feelings about portfolio and deter them from using portfolios in their future teaching. I believe that one way to make our students' first formal experience with portfolio a positive one is to delay the use of the assessment portfolio at least to their junior year when they are more mature and ready professionally. Let our students get involved in the process first, not just the product. Let the portfolio "provide a means for preservice teachers to reflect on their own growth and assess their own learning" (Dutt, Tallerico, & Kayler, 1997) before it is used as a demonstration showcase for professional organizations or authorities.

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