Problems, Pitfalls, and Benefits of Portfolios

By Bernice A. Stone

Portfolios, "one more thing to do" for overworked student teachers, may not be considered important by students who are already stressed by their heavy load of teaching and their focus on obtaining a teaching job. Are they worth the time and effort required? Training a large group of student teachers in their final semester of student teaching to develop portfolios was an eye-opening experience.

Students in a cohort program, Block A, at California State University, Fresno are required to develop portfolios in their first semester of initial student teaching. Portfolios for student teaching assessment have been used in the Block A Program for the past seven years. They are an excellent means for student teachers to document and reflect on their learning and growth as teachers.

The portfolio is organized into five sections that represent the competencies they are required to achieve to complete their credential: plannning and organizing, classroom teaching, classroom management, interpersonal relations, and professional development. Students are directed to collect materials for their portfolio as they progress through student teaching. Items collected document and demonstrate their experiences, their achievements, and their progress through their student teaching semesters. They include lesson plans, units, projects, student work, evaluations by master teach-

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ers and supervisors, newsletters, awards, photographs, and letters and notes from students, parents, and administrators. Reflections are represented by logs, journals, self-evaluations, teaching philosophy, and reflective captions. All items in the portfolio have a reflective caption which explains what the item is, why it was selected, why it is important, and how it affected the student's teaching and learning.

Students develop a philosophy of education and goals for student teaching during their first semester. At the end of the first semester a portfolio conference is held with the professor to assess their portfolio and their accomplishments and to develop new goals for final student teaching. The final student teaching portfolio includes a resume and final reflections on what the student learned and what goals were accomplished. At this point they are able to use their portfolios as a showcase for their job search.

Why Portfolios? Research and Perspectives

A teaching portfolio is defined as a structured collection of evidence of a teacher's best work that demonstrates a teacher's accomplishments over time and across a variety of contexts (Edgerton, Hutchings, & Quinlan, 1992). Portfolios allow us to combine actual artifacts of teaching with a teacher's reflections, enabling us to look beneath the surface of the performance itself and examine the decisions that shaped a teacher's actions. Kenneth P. Wolf(1991) declares, "Portfolios provide a connection to the contexts and personal histories of real teaching and make it possible to document the unfolding of both teaching and learning over time" (p. 129). Currently, portfolios are being widely used across the country by teacher preparation programs to promote student learning, professional development, and reflection and to provide evidence for evaluation. They are a valuable tool for teacher education because they are a more authentic method of evaluation.

The need for portfolios in preservice education was clearly expressed by Lee S. Shulman (1992) who argued that "teaching is like dry ice, it evaporates and goes away...student teachers are told to learn from experience but the experience doesn't stay put so one can learn from it." Portfolios serve as an attempt to get experience to stay put so one can learn from it. They help students to understand what is happening in their program and help them to reflect on their own failures and frustrations as well as successes.

Research supports portfolios as a means for reflection on experience, for linking theory to practice, for teaching assessment, and for professional growth. The view of the teacher as a reflective professional is supported by research on teacher thinking and effective teacher education programs not only develop teaching skills but change students' thinking as well (Clark & Peterson, 1986). Self understanding in the form of reflection on one's personal and practical knowledge of teaching comes before meaningful and substantial changes in teaching behavior and self-understanding is a key to professional growth in teaching (Connelly & Clandinin, 1988). The process of becoming a reflective professional begins during

preservice teacher education and reflective skills should be developed early in teacher preparation programs (Clark, 1992). The role of the university in professional development is providing a link between the "high ground of research-based theory and the messy swamp of professional practice" argues Donald A. Schon (1987, p. 3). Preservice teachers in Stanford's STEP project found portfolios an excellent tool for personal reflection and growth because they created a meaningful context in which they discussed the demands of practice on an equal footing with research-based knowledge (Lichentenstein, Rubin, & Grant,1992).

New conceptions of teaching and learning and dissatisfaction with standardized tests have led educators to seek alternative forms of assessment which are more authentic. Performance assessments such as portfolios require teachers to demonstrate application of knowledge rather than just the knowledge itself (Long & Stansbury, 1994). Although portfolios usually require more time and work on the part of both assessors and teachers themselves, they have the potential of providing much richer information than do traditional assessment methods (Long & Stansbury, 1994). Results of the four-year Teacher Assessment Project (TAP) at Stanford reported that engaging in the process of portfolio development appears to encourage teachers to become generally more reflective about their teaching practices (Vavrus & Collins, 1991). Teachers in the TAP study stated portfolios accurately reflected what took place in classrooms.

Today, many universities, states, and school districts are using portfolios for the assessment of teaching. Portfolios are an integral element in the process used by the National Board for Professional Teaching Standards to nationally certify professional teachers. In higher education, in addition to student teacher portfolios, the American Association of Higher Education is promoting portfolios as a means to improve college and university teaching (Wolf, 1991).

Portfolio assessment is not only authentic and dynamic, but as Suzanne Krause (1996) states, "process of developing the portfolio shifts ownership of and responsibility for learning to the learner" (p. 130). However, developing a portfolio can be difficult for preservice teachers who are unfamiliar with this new assessment process and have limited time to devote to the project. Krause (1996) found that specific instruction was needed in order for students to comprehend portfolio development. Sufficient time and support from supervisors are also important.

Constructing Portfolios—The Study

The population for this study were two groups of students entering their final semester of student teaching. *Group 1*, Block A, was a school-based, cohort program with 25 students who remain together as a group during their one year teacher preparation program. All course work is offered in a portable classroom at the school site and student teaching is provided at the school site as well as at nearby schools. Developed by a team of four professors to emphasize practical applications

as well as theoretical aspects, the Block A program coordinates courses with classroom practice by integrating course work with field experiences. Professors and supervisors meet on a regular basis to coordinate coursework as well as plan for integration. Students were supervised by one of the professors and one part-time supervisor.

Group 2, mainstream students, were a group of 60 students randomly selected from the regular teacher education program based at the university and were not part of a cohort group. All courses were taken by the students at the university from various professors who did not attempt to coordinate courses or integrate coursework with field experiences. They were supervised in their field experiences by five part-time supervisors who were not tenure-track faculty members and did not communicate with professors. Portfolios were not required during their initial student teaching.

During the 1995-96 academic year, Group 1, the 25 students from the Block A program were presented with information on portfolio development in September, near the beginning of their initial student teaching experience, during their student teaching seminars. They received support and assistance with their portfolios throughout the year from their two supervisors. Portfolios were evaluated by supervisors after both the initial and final semesters of student teaching.

Group 2, the 60 student teachers from the mainstream teacher preparation program at the university, were introduced to portfolios. at the beginning of their final student teaching semester in February. Group 2 supervisors were trained in portfolio development and also provided assistance to students in portfolio preparation during their student teaching seminars. In May, at the end of the spring semester, a comparison was made of the two groups and the results evaluated. The objective of the study was to examine the impact of portfolio construction on student learning and reflection in the two groups who had differing levels of guidance and in portfolio preparation and construction. In addition, the process of portfolio development was examined to determine an effective method for student teacher portfolio construction at the university. Finally, data was gathered on the perceptions of both students and supervisors concerning the portfolio process.

The research questions were:

1. To what extent did students perceive portfolios as clearly communicating their learning and accomplishments during student teaching?
2. To what extent did students perceive portfolios as a means to encourage reflection and learning about teaching?
3. To what extent did the the students perceive the workshops and instruction provided as adequate to meet their needs?
4. What problems did students have constructing their portfolios?
5. What problems did supervisors perceive students having in constructing portfolios?

Methods and Data Source

At the beginning of the spring semester, in February, five supervisors, who would work with Group 2 (mainstream student teachers), attended a morning

workshop session on portfolio development. They were expected to directly assist students in constructing their portfolios. The following week Group 2 and their supervisors met for a large group presentation. Detailed instructions, handouts, demonstrations, activities and samples of completed student teacher portfolios were provided during the morning workshop. Near the end of the session, students broke up into small groups with their supervisors to discuss plans for beginning on their portfolios. The project director was available to both students and supervisors for assistance throughout the semester.

One month later, a follow-up workshop with the Group 2 students featured an experienced teacher, who had completed her National Board for Professional Teaching Standards certification. She shared her professional portfolio with the students and answered questions. We also reviewed aspects of the portfolio and practiced writing reflections. Students had barely begun developing their portfolios at that point.

At the completion of the final student teaching semester, in May, student teachers in both groups, Group 1 (Block A) and Group 2 (mainstream), completed a questionnaire with both closed and forced-choice questions to evaluate their experience with portfolios. Supervisors for Group 2 also completed questionnaires. In addition, semi-structured interviews with students and supervisors concerning the portfolio project were held. Results of the surveys and interviews were analyzed using both quantitative and qualitative methods. Using ethnographic procedures designed specifically for the analysis of text-based qualitative data (Spradley, 1980), open-ended questions and interviews were systematically analyzed to determine categories and relevance to research questions. To ensure validity standard triangulation procedures were used. Several data sources, two data collectors as well as two researchers to analyze data were involved in the project.

Comparison of the Two Groups

Portfolio Construction

For Group 1 (Block A), 100 percent of the students completed their portfolios and 85 percent used them for job interviews in the spring. In Group 2 (mainstream) only 20 percent completed their portfolios and used them for job interviews.

Research Questions

1. To what extent did students perceive portfolios as clearly communicating their learning and accomplishments during student teaching? In Group 1 the majority of the students (75 percent) believed portfolios communicated and documented learning and acomplishments. For Group 2 only 48 percent of the students felt the portfolios communicated and documented learning and accomplishment.

2. To what extent did students perceive portfolios as a means to encourage reflection and learning about teaching? The majority of Group 1 (75 percent) felt that they were more reflective about their teaching, but only 68 percent of Group

2 thought portfolios helped them to be more reflective.

3. To what extent did the students perceive the workshops and instruction provided as adequate to meet their needs? All students in Group 1 thought the project was successful and worthwhile and the portfolios were useful for them. For Group 2, 22 percent thought it was very successful and worthwhile, 33 percent thought the project was useful, 33 percent thought it was useful but needed improvement, and 12 percent thought it was unsuccessful and useless. However, most of the students in Group 2 who completed portfolios reported that their portfolios were not evaluated by their supervisors.

4. What problems did students have constructing their portfolios? Problems included lack of time, stress, heavy student teaching and course loads, lack of understanding and assistance, difficulty in collecting and selecting artifacts, and writing reflections.

5. What problems did supervisors perceive students having in contructing portfolios? Supervisors were insecure in their knowledge and experience of portfolio construction, although willing to help. With their heavy supervision load they did not find time to carefully evaluate portfolios and provide appropriate feedback. In the spring semester, most of the students were anxious to find teaching positions and did not place importance on the development of portfolios. Consequently, supervisors did not push students to complete their portfolios. Since this was a pilot project and not a university requirement, students and supervisors did not see this as essential for the completion of the credential but as an added burden for a busy semester.

Problems, Pitfalls and Benefits

Analysis of the open-ended questions and interviews provided three categories—problems, pitfalls, and benefits—that will serve as an organizer for participant comments concerning portfolio construction.

Problems

◆ *I started getting stressed out because it was one more thing to do.*
◆ *It was evident the process was time consuming and I wasn't prepared for the time committment.*
◆ *Felt extremely overwhelmed with everything else going on this semester.*

The major problem that emerged for all students was the lack of time, considering that these students were doing their full-time student teaching as well as taking one or two courses at night. Portfolio construction is extremely time consuming and students in Group 2 did not have the head start in developing their portfolios that Group 1 did. They were presented the concept and needed to understand the process before they could develop their portfolio.

Other problems that came to the forefront were: (1) confusion and limited understanding of the process; (2) lack of assistance from supervisors and Master

Teachers, most did not know the process very well themselves; (3) difficulty in both the collection and selection of artifacts, they were unsure what should go in the portfolio and sometimes failed to put materials aside or collect important items such as student work; and (4) difficulty in writing reflections. Reflection is a process that needs to be nurtured and developed; it doesn't come easily to students.

Pitfalls

A number of pitfalls hindered the construction of portfolios.

◆ *Need to get started early, working on it from the beginning of the year is the best idea.*
◆ *Better to begin during undergraduate coursework.*

Beginning the process during final student teaching was a hindrance for Group 2. Students need time to gradually learn about portfolios and gain an understanding of portfolio construction and reflection on practice. The one-year teacher credential program is heavily loaded with coursework and student teaching with not enough time for reflection or for portfolio development. Students were torn between meeting student teaching responsibilities, course work, and other requirements. They were not prepared or able to put in the time needed to develop a professional portfolio.

◆ *Supervisor was new at it—no one was sure.*
◆ *Volunteered help all the time, set up workshops and seminars, checked our progress.*
◆ *Looking at finished portfolios of someone who got a job was most helpful.*

Supervisors were not knowledgable and experienced in portfolio construction.

Table 1
Comparison of Responses of Two Student Teacher Groups
on Completion and Perception of Portfolio Process

Portfolio Attributes	% of Students Group 1	Group 2
Completion of Portfolios	100%	20%
Means to communicate learning and accomplishments	75%	48%
Means to encourage reflection and learning about teaching	75%	68%
Instruction/workshops		
successful and worthwhile	100%	22%
useful		33%
useful, needs improvement		33%
unsuccessful & useless		12%

Although they assisted the students with their portfolios they tended to encourage students to focus on job interviews rather than reflection. During the spring semester many students were attending "Job Fairs" and naturally tended to be more concerned with resumes and interviews than portfolios. Supervisors provided assistance by answering questions, giving advice, and reviewing portfolios. Portfolios were shared with other students and completed portfolios were available. Some Master Teachers provided help but most were not involved at all.

Benefits

◆*Though it is very time consuming it provides us with a valuable record of our learning and accomplishment as a student teacher.*

◆ *It is important to go through this self-evaluation process. By creating my portfolio I have had time to reflect on my teaching—all aspects of it.*

◆ *Portfolios are worthwhile for job search process—more than one way to market yourself.*

Approximately half of the students in Group 2 felt portfolios were worthwhile but did not have enough time to construct them. Over half of the students thought portfolios helped them to be more reflective. They seemed to be aware of the benefits but had no time to take advantage of this. Those students whose portfolios were still being processed said they planned to complete them and use them for interviews in the future. Group 1 students, with more time to construct their portfolios, were able to benefit from the reflection as well as using their portfolios for job interviews.

Additional benefits were highlighted by both groups, but Group 1 members were more likely to identify these benefits:

Communicating Learning and Accomplishments: All students in Group 1 and about half of students in Group 2 perceived portfolios as clearly communicating learning and accomplishments.

Means to Encourage Reflection and Learning about Teaching: All of Group 1 and 68 percent of Group 2 perceived portfolios as a means to encourage reflection and and learning about teaching.

Portfolio Workshops and Instruction: All of Group 1 and 84 percent of Group 2 perceived the workshops and instruction as adequate to meet their needs.

Conclusions: Are Portfolios Worth the Time and Effort?

The numerous teacher educators across the country utilizing portfolios are clearly aware of their potential for promoting learning and reflection and perceive the benefits of portfolios outweigh the drawbacks (Anderson, DeMeulle, & Knowlton, 1996). However, questions of how they should be constructed, when constructed, and what should be included are still unanswered. The results of this

study indicate the following conclusions:

- ◆ Some students are aware of the benefits of portfolios but have difficulties developing them.
- ◆ Students may be confused and overwhelmed when faced with portfolio construction because of lack of understanding and the amount of time required.
- ◆ There is a need for a more carefully planned introduction to portfolios beginning early in the teacher preparation program, providing sufficient time for the concept to be assimilated.
- ◆ If the portfolio is used as a means of evaluation, reflection and learning then time must be spent teaching students how to select artifacts and how to reflect on their learning in the classroom. This cannot be done in a one-shot or even a two-shot workshop but must be developed over time in a variety of contexts.
- ◆ Supervisors and others who assist and evaluate portfolios need to be knowledgable and experienced in their development. There must be sufficient time for supervisors to provide individual feedback, assistance and evaluation during portfolio construction.

Portfolios as Assessment

Portfolios are a form of assessment that shift the responsibility and ownership of learning to the student, encourage students to reflect on their learning, integrate theory with practice, and become more knowedgable about assessment issues. Sounds like the answer to the teacher educator's prayers, but is it? Unfortunately, there are more questions than answers on portfolios, more rhetoric than research.

A survey of teacher educators around the country describing their use of portfolios resulted in three major conclusions (Anderson, DeMeulle, & Knowlton, 1996):

(1) The full value of portfolios has not been explicitly recognized by teacher educators. Portfolios can have a real impact on both practice and program;

(2) Use of portfolios as an assessment tool is reflective of a constructivist paradigm, and as a result, teacher educators are experiencing both benefits and tensions. If a program is not grounded in a constructivist perspective, the use of portfolios may increase tensions; and

(3) Portfolios serve multiple assessment purposes, and when the preservice teacher becomes an active stakeholder in assessment many questions and ambiguities arise. Questions arise concerning reliability, validity and value of portfolio assessment.

This study strongly supports the need for a more careful implementation of portfolios. They are not just a means to document what is learned in student teaching and to help students get a job, but an important instrument for the development of

reflection, self evaluation, and professional development. Teacher educators who are utilizing portfolios need to devote more attention to promoting reflection throughout the teacher preparation program as part of a constructivist approach. Students need to be directly taught the skills of self evaluation and reflection and supervisors must provide the necessary support to ensure construction of thoughtful, meaningful portfolios. Teacher educators who are using or considering using portfolios need more information concerning their usefulness and benefits to students as well as the best methods to assist students in the construction of portfolios. Empirical research is greatly needed to provide important data on the uses and usefulness of portfolios in teacher education.

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