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ABSTRACT

This pamphlet describes the process of beginning to use portfolios in an elementary teacher training program. It defines the concept of portfolios and provides a rationale for their use in teacher education programs. Portfolios are suggested for use in preservice teacher education in three ways: to evaluate the preservice teacher education program, to enhance and document active student learning, and to provide students with a personal marketing tool after graduation. The pamphlet describes the portfolio process, including the six steps involved in adopting portfolios for documenting professional growth in a teacher education program: adopt a philosophy statement; decide on outcomes that reflect the teacher education program; determine the purposes for using portfolios; select specific types of artifacts that students will include; decide a process for implementing portfolios; and write a manual to serve as a guide for faculty and students. The pamphlet concludes that the portfolio development process has energized faculty to continue their best efforts in facilitating the professional growth of future teachers. (JDD)

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Portfolio Development for Preservice Teachers

Diane Hood Nettles
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Portfolio Development for Preservice Teachers

by
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Introduction

One afternoon, after a faculty meeting at our small state university, members of the elementary education faculty were chatting about their students' job-hunting efforts. One professor recounted her recent visit to a local school and a conversation with a principal. This principal had told her about needing to fill four teaching positions. He had received more than 800 applications.

Our faculty member asked him, "What made the difference in your decision of whom to hire?"

The principal had begun with a thorough examination of the applicants' transcripts, which resulted in the initial interview pool. Then the principal talked about the candidates' self-confidence and enthusiasm in the interview, their knowledge of content and pedagogy, and a variety of other factors. But one factor stood out from all the others. All of the teachers he hired had come to the interview with a professional portfolio.

"That," he said, "really impressed me."

For several months, members of our faculty had been kicking around ideas for assessing and evaluating our students in more holistic ways. We had become concerned that a mixed message was being sent to our students. As advocates of such teaching philosophies as whole language, we were encouraging our own preservice teachers to become "kidwatchers" (Goodman 1986) and to continually examine all facets of learning that add to the child's whole being. Yet we were focusing on grades as the only measure of a preservice teacher's ability, and

many of us had no idea of what our students were capable of doing beyond the activities that were done in our own classes. As one of our faculty remarked, "I never have the opportunity to see the whole picture of our students' abilities, because the only product I ever see is the grade I've given them!"

That comment turned the conversation toward departmental self-evaluation. How could we assess our effectiveness as teacher educators? Some of the methods we had used in the past were exit interviews, data on the number of our graduates who found employment, surveys of our graduates' employers, and observations of our students as student teachers. However, these are summative methods that focus on the products, just as grades do. We were interested in formative evaluation so that we could evaluate ourselves *and* our preservice teachers as they progressed through our teacher education program.

It became clear to us that we needed to develop methods of assessment and self-evaluation that would reflect more accurately the learning processes of our students. Such assessment also would reflect our goals more accurately, and we would be better able to document whether we reached our goals by using a more holistic method of assessment. As "facilitators of learning" for our preservice education students (Campbell 1990, p. 8), we felt that we needed to be more diagnostic and self-reflective in the evaluation of our student's abilities. At the same time, we wanted our students to gain more control over their own learning by doing the same thing.

The climate was right for moving away from reliance on traditional assessment methods toward a broader, more flexible approach. Thus the concept of portfolio assessments for our preservice teachers was born.

Our approach addressed two specific questions:

1. Have we met our goals as teachers? The answer to this question would help us to evaluate ourselves as individual teachers and as a department.

2. Have students met the learning goals established for the teacher education program? The answer to this question would help students evaluate themselves, in addition to allowing the faculty to evaluate students.

Because portfolios are personal collections of "materials that reflect progress toward intended learning goals" (Ryan and Kuhs 1993, p. 76), we believed that the development of portfolios would help us answer these questions.

This fastback describes the process that we undertook to begin using portfolios in our elementary teacher training program. First, we briefly define the concept of portfolios and provide a rationale for their use in teacher education programs. Then we describe the portfolio process, including a detailed description of the six steps involved in adopting portfolios for documenting professional growth in a teacher education program. We show how program goals, or outcomes, serve as a foundation for the construction of portfolios.

Concept and Rationale

For many years artists have documented their work using collections of authentic samples of their artistic expression. Our memories of walking across a campus during our own college years include visions of student artists toting black, cumbersome, poster-size folders in and out of elevators, dorms, and classrooms. When we glimpsed into the folders of our artist friends, we found not only collections of polished work but also curious and idiosyncratic works that conveyed a sense of the artist's diversity of thoughts and pursuits in the field of art. These recollections of the artists' portfolios gave us a foundation for our thoughts about portfolios in general.

Preservice education portfolios are collections of authentic, learner-specific documents that give evidence of growth and development toward becoming teachers. Portfolios also are an acknowledgment that teacher development is an individualized process. They reflect a student's progress over time and, just as important, they help to document whether we on the faculty are succeeding in meeting our goals for preparing teachers.

We specifically use portfolios in three ways:

To evaluate the preservice teacher education program. As students begin to create portfolios, patterns evolve. We begin to see that students are able to document some skills and abilities better than others. This provides us with opportunities to improve our courses, assignments, and syllabi.

To enhance and document active student learning. Portfolios help preservice teachers become more active in their own learning. Because a portfolio is self-initiated documentation of growth, students select items to be included. This gives them control over their own learning, awareness of their own strengths and weaknesses, and the opportunity to make choices about how they wish to present themselves as professionals.

To provide students with a personal marketing tool after graduation. Portfolios provide evidence of teaching skills, achievements, and abilities for prospective employers. They are more reflective of personal strengths and are more revealing about the preservice teacher than a transcript or test score.

The Portfolio Process

There are six steps in initiating the portfolio process for preservice teacher education. Faculty should:

1. Adopt a philosophy statement.
2. Decide on outcomes that reflect the teacher education program.
3. Decide the purpose(s) for using portfolios in the program.
4. Select specific types of artifacts — such as reports, work samples, etc. — that students will include to document outcomes.
5. Decide a process for implementing portfolios.
6. Write a manual to serve as a guide for faculty and students.

Step One: Adopt a Philosophy Statement

In the process of our program review, we concluded that our teaching reflected one basic theory of learning. Our goal for teaching preservice teachers is to provide them with an orientation to a developmental interactionist view to teaching and learning (Biber 1976; Campbell 1990). This view posits that children learn by constructing their own knowledge based on their environment, with the teacher acting as a facilitator rather than as a dispenser of knowledge. Thus we adopted this statement as our departmental philosophy.

For departments and schools to effectively implement the use of portfolios, we recommend that a similar discussion take place. Faculty need to reach consensus about the learning theories that guide them and shape the teacher education program. Putting this consensus into

a single, succinct philosophy statement makes an effective starting point for the development of the portfolio program.

Step Two: Decide on Outcomes

Based on our philosophy statement, we decided on outcomes that reflected the program. These outcomes were specific behaviors that we deemed to be necessary for good teaching to occur.

The use of outcomes is vital because they are the goals toward which education faculty and students will work. They are the statements that guide the building of a professional portfolio. The number of outcomes included in the program is not as important as their comprehensiveness, their reflection on what the faculty believes is important for teachers to know and do, and their adherence to the philosophy of the education department or college.

In 1990 our department had written a set of student outcomes that were then revised in 1993. The revision was based on the principles posited in September 1992 by the Interstate New Teacher Assessment and Support Consortium, a division of the Council of Chief State School Officers. The principles from the INTASC were chosen for two reasons. First, they reflected what *we* believe about teaching and learning. Second, they are part of a sound plan for national licensing of teachers. We felt that it was important for our outcomes to reflect both of these factors. Our interpretation of the INTASC principles evolved into 10 outcome statements that reflect areas of personal and professional development. Following are those 10 statements:

Outcome 1: Formal and informal assessment skills. Preservice teachers should have not only a knowledge of assessment strategies but also the ability to use this information for the positive development of their students. A wide variety of assessment methods, both formal and informal, will help preservice teachers become more aware of their students' attitudes and interests, as well as their academic development. While formal assessments, such as achievement and aptitude

tests, yield readily identifiable scores. they do not cover all of the skills that are taught. Informal assessments, on the other hand, can test any skill that is taught and so alert the teacher to weak areas for quick remediation.

It is important for preservice teachers to realize that there are many ways of demonstrating their skills in assessing students. Many preservice teachers associate assessment with traditional number scores, such as those derived from standardized achievement tests or aptitude tests. However, informal reading inventories, anecdotal records, informal observations, checklists, informal interviews, interest inventories, writing samples, questionnaires, metacognition surveys, and portfolios all qualify as assessment tools. All of these are possible artifacts for documentation.

Outcome 2: Diagnosis and matchmaking skills. Using educational, social, cultural, and psychological data, preservice teachers should be able to implement learning experiences that are appropriate for the individuals and groups observed. Although preservice teachers come to the classroom with their own beliefs about how children learn, it is important that they now make sound judgments about which instructional strategies to use, modify, or reject according to the needs of their present classroom. Observation will help verify students' strengths, weaknesses, knowledge, and skills, which will be necessary in planning a successful program. Practice in observation will sharpen preservice teachers' ability to identify the optimal match between the students and their educational, social, and cultural experiences.

Artifacts that might provide documentation of this outcome include reflective journals, lessons and unit plans, critiques of lessons, individualized plans and contracts, and observation reports.

Outcome 3: Knowledge and use of environments and materials. If this outcome is met, the preservice teacher becomes a facilitator of learning who helps children construct their own knowledge by manipulating materials, interacting with new information, and engaging

in meaningful experiences with peers. Preservice teachers must have the ability to create responsive environments for learning with a wide variety of interesting materials in a flexible and functional classroom arrangement. In addition, preservice teachers need to recognize that cognitive and affective objectives are integrated in all areas of the curriculum. Preservice teachers might document their understandings in this area by including activities in their portfolios that reflect discovery learning, inquiry learning, problem solving, inductive learning, child-initiated learning, social collaboration, and play as a learning medium.

Artifacts that might qualify under this outcome include floor plans, copies of creative teaching materials, lesson plans, examples of collaborative planning, examples of student products, integrated unit plans, media competency checklists, plans for child-initiated learning, journal entries, and supervisor evaluations.

Outcome 4: Instructional planning skills. This outcome acknowledges that teachers are able to use a variety of teaching strategies that encourage students' development of critical thinking, problem solving, and decision making. Instruction may involve the use of simulations, demonstrations, cooperative learning, role playing, experimentation and discovery, anticipation guides, mapping, analogies, and student questioning. Therefore, effective thinking is both creative and critical.

Lesson plans are the most helpful artifact for documenting this outcome. Specific teaching strategies might be highlighted in various plans.

Outcome 5: Classroom management skills. Facilitating positive social interaction, active engagement in learning, and self-motivation are important goals for the preservice teacher. To reach these goals, the preservice teacher should know how to provide and maintain a classroom environment that is conducive to learning without inhibiting personal growth and group cooperation. Intrinsic motivation, rather than external rewards and punishments, becomes possible because learning is relevant, meaningful, challenging, and developmentally appropriate.

Artifact possibilities include classroom rules and procedures, cooperative learning strategies, daily classroom schedules, and a discipline philosophy.

Outcome 6: Knowledge of philosophical and social influences. Preservice teachers should be able to plan instruction effectively. Such planning reflects their knowledge of subject matter, but it also involves much more. Plans must be made within a philosophical framework, one that the preservice teacher has chosen independently. The needs of the students that they will teach must be part of this philosophical framework, so that the students' cognitive, affective, and physical growth will be facilitated. In addition, the needs of the community must be considered, because students interact with the world outside the classroom. Parent and community standards and expectations must be considered. Without such an orientation, the teacher risks merely focusing on filling time with activities, rather than offering a cohesive program that has purpose. Our responsibility as teacher educators is to introduce philosophical orientations from which preservice teachers can make both long-term and short-term plans.

Preservice teachers might document their abilities to plan instruction that takes into account philosophical and social influences by using many types of artifacts, including correspondence with community resources, lesson or unit plans in which philosophical beliefs are evident and highlighted, personal mission or philosophy statements, position papers, reflective journal entries, and letters to parents.

Outcome 7: Knowledge of content. The central concepts, tools of inquiry, and structures of the content areas taught at the early childhood and elementary levels are essential for preservice teachers. Because of the diverse nature of elementary school teaching, it is important for preservice teachers to be well-versed in all subjects that young children are taught. Such a knowledge must encompass the ability to create learning experiences that make the subject matter meaningful to children. Thus preservice teachers must be facilitators of knowledge in many

areas. This outcome is twofold: First, the teacher must know the subject well. Second, the teacher must know how to teach the subject well.

Possible artifacts for documenting this outcome are lesson plans, research papers, National Teachers' Exam (NTE) scores, subject matter webs, and critiques of video scenarios.

Outcome 8: Knowledge of child development. It is important for the preservice teacher to know how children and adolescents learn and develop. This knowledge sets them apart from mere dispensers of knowledge. Their abilities to provide learning opportunities are influenced by their knowledge of the intellectual, social/emotional, and physical development of their young students. Thus children and pre-adolescents can learn in an environment that is conducive to their growth and well-being.

Artifact possibilities include anecdotal records; student assessments; case studies of students; examples of individualized lesson plans or plans adapted for special learners; interviews with students, parents, or teachers; and portfolio entries provided by children.

Outcome 9: Professional commitment and responsibility. Self-reflection is the mark of a good teacher. The preservice teacher should evaluate continually the effects of his or her choices and actions on children, parents, and other professionals. This type of evaluation is fostered when the preservice teacher seeks ways to continue learning outside the college classroom, such as through active membership in professional societies, attendance at workshops, and community work. Such actions help the preservice teacher to evaluate what he or she "knows" and to modify previously held ideas about teaching. Greater professional growth is the result.

There are many ways to document professional commitment and responsibility. Some artifacts are correspondence with community resources, logs of professional meetings and workshops, evidence of journal subscriptions, summaries of volunteer experiences, and evidence of professional organization or committee memberships.

Outcome 10: School-home-community cooperation. One of the most important facets of teaching lies outside the classroom. Indeed, the surrounding community may have more influence over students than their school. The preservice teacher who is aware of this makes good use of community resources, at the same time serving as a resource to the community. The ability to work well with parents and social agencies is essential to the cooperative effort needed in educating children. In addition, preservice teachers need to seek opportunities to enhance their awareness of the cultural environment in the community.

The following artifacts might be used to document proficiency in this outcome statement: evidence of community involvement, examples of collaborative planning, letters of recommendation from community leaders, critiques of cultural events, and pictures from parental meetings or workshops.

Step Three: Decide the Purpose for Portfolios

In determining the advantages of a portfolio system in our program, five reasons for using them evolved:

1. Portfolios allow preservice teachers to organize their work.
2. Portfolios require that preservice teachers rationalize the importance of their documents.
3. Portfolios require preservice teachers to reflect on their own work.
4. Portfolios help preservice teachers to see a purpose for their college assignments in the education program.
5. Portfolios require professors of education to reflect on their own work.

Each of these reasons merits further explanation. First, preservice teachers begin to organize their work by building a portfolio. While we suggest several types of artifacts for each outcome category, our preservice teachers have the freedom to choose the documents they

want to include. Categorizing artifacts that reflect program outcomes allows them to see the types of abilities they are developing as they complete their education courses. Strengths as well as weaknesses become evident.

Naturally, the quality of some artifacts will be better than others, giving preservice teachers a picture of the challenges that lay before them. For example, on examining the contents of her working portfolio, a preservice teacher may realize that she is quite good at writing position papers that reflect her beliefs, but her abilities to write lesson plans are not as strong. This insight gives her a goal toward which to work.

Second, preservice teachers must provide a rationale for their choice of documents. Each artifact is accompanied by a required rationale page. The rationale is a statement explaining the reason for inserting the artifact into the chosen outcome category. Writing a rationale allows our students to reflect on their work, both in deciding for which outcome the artifact provides evidence and in realizing their proficiency in that particular teaching skill. According to Cole (1992), the rationale statements are as important as the artifacts themselves:

Artifacts have little meaning, however, without reflections. By providing both the artifacts and the reflections, an authentic and multi-textured view of actual teaching that took place as well as the insight into the thinking behind the teaching occur. (p. 10)

Third, preservice teachers reflect on their own work. Including the rationale page for each artifact means that preservice teachers must learn the skill of reflective writing. Because they tend to summarize rather than analyze (Cole 1992; Van Mannen 1977), many preservice teachers need training in this skill. Such training is necessary for more than fulfilling the portfolio requirements. A good teacher is able to reflect on and analyze his or her instructional decisions, the students' products, and the learning climate. This type of reflection leads to professional growth. Reflection might take place merely in one's head dur-

ing idle hours; however, the ability to write reflectively in a coherent manner so that others can understand the reflection and perhaps benefit from it is one of the responsibilities of a true professional.

Fourth, preservice teachers should see a purpose for their assignments in the college of education. Often students complain that assignments are mere "busy work." and so they complete them grudgingly and without commitment. However, once assignments are included as artifacts in the outcome categories, preservice teachers begin to see that they are indeed working toward real and specific goals.

Some outcomes are documented more easily than others. This reflects our program and causes us to look at the types of assignments that we give to our students. It may become necessary to allow more freedom of choices in assignments. For instance, a student might examine his working portfolio and discover that he has no documents for Outcome 6 (knowledge of philosophical and social influences). For his reading methods class, his professor has given an assignment to critique a professional journal article on the subject of reading. Allowing this student a wider choice of articles will enable him to document this outcome more effectively. For example, the student might read an article that discusses philosophical points of view and how they are influenced by society and then analyze it in terms of what this means to the reading teacher. Thus the portfolio might allow a student to gain more control over his or her learning while still meeting our departmental goals.

Fifth, the portfolio is a means of self-evaluation for our department. We challenge our students to look for undocumented outcomes throughout their coursework. It becomes our challenge as well to make sure our program is doing what we intend it to do. If we find that outcome statements are not well-documented by several of our students, then this finding means that we need to teach more carefully toward that outcome and provide more opportunities for practicing those skills. After all, the outcome statements are our goals. We want to be sure we are doing what we can to help our students meet them.

Step Four: Select Types of Artifacts

As a department, we brainstormed a variety of artifacts that would be appropriate evidence for these student outcomes. Ideas came from classroom assignments that we have given to our students, as well as from reference letters, teacher evaluations, transcripts, and résumés, which students already were gathering. We gave some thought to the possibility of categorizing the artifacts for the students and making a list of artifacts that could be used for each outcome statement. However, one of our goals was to enable our students to exert more control over their own learning. Therefore, we simply listed the possible artifacts in a glossary in our manual, titled "Portfolio Development Manual" (Campbell et al. 1993). The glossary defines what we mean by the individual artifact terms and makes suggestions for the types of skills that each artifact may document. The preservice teachers decide for themselves where to place their artifacts in their portfolios.

Following are a few of the possible artifacts:

anecdotal records	literature logs
article summaries	observation reports
bulletin board ideas	peer critiques
computer programs	position papers
copies of awards	reflective journals
discipline philosophy	sample parent letters
lesson plans	supervisor's evaluations

A glossary entry is provided for each possible artifact. Following is a sample entry:

Lesson plans — Copies of your lesson plans should include all components of a workable plan: objectives, materials, introduction, procedures, closing and evaluation. Sometimes plans may be used for more than one outcome. In this case, highlight the specific part of the plan that documents the outcome. Instructional planning skills will be most obviously documented with lesson plans; however, it is possible that knowledge of content, use of environments and materials, and knowl-

edge of child development could be documented here. (Campbell et al. 1993, p. 22)

Step Five: Describe the Process for Implementing Portfolios

Building a portfolio is a process, leading to a product. Preservice teachers begin their teacher education program with a working portfolio, which documents growth throughout their academic careers. As their education progresses, they make decisions about which documents to include in the portfolio. Portfolios are not meant to be “prescriptive and restrictive” (Ryan and Kuhs 1993, p. 79), but rather flexible documentation of growth. As time passes, preservice teachers choose to exclude some documents and add new ones, documenting the fact that learning takes place through mistakes and reflection on those mistakes. Conscious decisions by preservice teachers are exemplified in the process of building a portfolio, because they select, justify, and show their best work, their philosophies, their priorities, and their perspectives on the profession. Thus students in the education program are in control of their own portfolios.

As they near graduation, students complete the process by creating a final product, the presentation portfolio. At this point, students are encouraged to include only a few specific documents. Employers do not have time to examine portfolios for longer than about five minutes. Principals in particular are interested in a prospective teacher’s portfolio, but they want to see only the most pertinent information (Smolen and Newman 1992). Therefore, we recommend that students be selective in what they choose for the presentation portfolio. No more than one or two quality documents in each section are needed. In addition, we recommend that students include the following items:

- Résumé
- Three letters of recommendation
- Student teaching evaluations

- Philosophy of education statement
- Lesson plans that specifically address outcomes
- Autobiography

In order to gain the advantages of using the portfolio, careful guidelines need to be followed. We decided that five checkpoints needed to be made during the preservice teacher's college career. At each of these checkpoints, the preservice teacher confers with an advisor about the progress of the working portfolio. The five checkpoints occur: 1) during the first professional education course that the student takes, 2) during an evaluation and measurements course, 3) on completion of 12 credit hours in the teacher education program, 4) during the admission to the student teaching screening process, and 5) on completion of student teaching, at which point the working portfolio is refined to become a presentation portfolio.

The following sequence of portfolio development has worked well for us:

1. On enrolling in the entry-level curriculum class as a sophomore, students obtain and read the "Portfolio Development Manual" written by our department members (Campbell et al. 1993).
2. Students purchase a notebook and enough tabs to index each outcome listed in the manual.
3. Students are asked to examine the possible artifacts that are described in the manual and become familiar with the types of artifacts that can be used to document the outcomes.
4. Students begin to collect artifacts and tentatively place them within an outcome category.
5. For each artifact, students write a rationale statement that explains why the artifact was chosen for that outcome statement. In addition, they describe how this artifact enabled them to grow in this teaching skill. As time goes on, some artifacts may need to be rearranged under a different outcome.

6. At the end of the curriculum course, the student meets with the professor for a portfolio interview. During this interview, they discuss the student's progress toward goals and understanding of the portfolio process. Quality, rather than quantity, of documents and rationale statements is most important.
7. On enrollment in the tests and measurements course, students prepare to share the portfolio with the professor in an interview.
8. As their coursework progresses, students continue to collect artifacts and write rationale statements, concentrating on outcomes that are not yet well-documented. They find ways to document them, including asking their professors for guidance in helping to make assignments meet goals. By this point, they may find it easier to place artifacts under the most appropriate outcome statements.
9. After completing 12 credit hours in the teacher education program, the advisors interview their students, who are asked to bring their portfolio to the interview, show their documented progress, and explain their goals.
10. Students continue to document outcomes throughout their coursework. By the time they are ready to apply for admission to student teaching, they should have most outcomes documented. At this point, they prepare for another interview with their faculty advisor about the portfolio. Outcomes that are not well-documented are examined as possible areas of challenge for student teaching. Strengths are discussed, and the students make plans to capitalize on these strengths during student teaching.
11. When the student teaching term is complete, the student's working portfolio is ready to become a presentation portfolio. This helps the preservice teachers become marketable when they apply for teaching positions.

Step Six: Write a Manual

In order to facilitate our students' understanding of the process of portfolio development, we developed the manual to which we have re-

ferred. This manual is designed to provide flexible guidance in helping students to build their portfolios. All students are required to purchase the manual when they enroll in their first curriculum and methods course at the end of their sophomore year. The manual contains four parts:

- Definition of Portfolios
- Guidelines for Assembling
- Outcome Statements
- Glossary of Artifacts

While writing the manual for our preservice teachers, we tried to anticipate some questions they might have as they developed their portfolios and included responses to such questions as:

- What is the difference between a working portfolio and a presentation portfolio?
- What type of notebook should I use?
- What should I do to the inside of the notebook?
- How do I document outcomes?
- How do I create a presentation portfolio?
- How do I make my presentation portfolio unique?

Conclusion

It has been almost two years since that faculty meeting when our first discussion of preservice teacher portfolios occurred. As a result of implementation, we are experiencing a heightened awareness of the need for portfolios in our program. Our students actually seem relieved to have a tangible piece of evidence that shows they are indeed growing and learning. Many students see the portfolio as a chance to showcase their progress, and they are proud of their own expertise.

Portfolios also have created a bridge between students and faculty, because we are both working to complete common goals. Faculty have had the opportunity to re-examine our program. Students' comments concerning the "holes" in their outcome documentation cause us to look more closely at the assignments we give to them and the outcomes that we expect them to have upon graduation.

This approach to implementing portfolio development in a teacher education program has worked for us. It outlined the underlying philosophy of our department, it specified measurable outcomes desirable for preservice teachers, it suggested possibilities for documenting these outcomes, and it delineated a timetable for implementation. In addition, it dealt with questions that preservice teachers ask on their way to developing their own marketability as professionals.

By following this approach, other teacher education departments may find, as we have found, that portfolio development sparks enthusiastic interest in both faculty and students. The process has energized us to continue our best efforts in facilitating the professional growth of our future teachers.

References

- Biber, B. "The Developmental-Interactor Point of View." In *The Preschool in Action*, 2nd ed., edited by M.C. Day and R.K. Parker. Boston: Allyn and Bacon, 1976.
- Campbell, D. "A Model of the Elementary/Early Childhood Program." Manuscript, California University of Pennsylvania, California, Pa., 1990.
- Campbell, D.; Melenzyer, B.; Nettles, D.; Petrick, P.; and Wyman, R. "Portfolio Development: A Manual for Preservice Teachers." Manuscript, California University of Pennsylvania, California, Pa., 1993.
- Cole, D.J. "The Developing Professional: Process and Product Portfolios." Paper presented at the annual meeting of the American Association of Colleges for Teacher Education, San Antonio, 1992. ERIC Document Reproduction Service No. ED 342 731.
- Goodman, K. *What's Whole in Whole Language*. Portsmouth, N.H.: Heinemann, 1986.
- Interstate New Teacher Assessment and Support Consortium. *Model Standards for Beginning Teachers Licensing and Development: A Resource for State Dialogue*. Washington, D.C.: Council of Chief State School Officers, 1992.
- Ryan, J.M., and Kuhs, T.M. "Assessments of Preservice Teachers and the Use of Portfolios." *Theory into Practice* 32 (Spring 1993): 75-81.
- Smolen, L., and Newman, C. "Portfolios: An Estimate of Their Validity and Practicality." Paper presented at the Annual Meeting of the Eastern Educational Research Association, Hilton Head, S.C., March 1992. ERIC Document Reproduction Service No. ED 342 820.
- Van Mannen, M. "Linking Ways of Knowing with Ways of Being Practical." *Curriculum Inquiry* 6 (November 1977): 205-28.

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Phi Delta Kappa Educational Foundation

The Phi Delta Kappa Educational Foundation was established on 13 October 1966 with the signing, by Dr. George H. Reavis, of the irrevocable trust agreement creating the Phi Delta Kappa Educational Foundation Trust.

George H. Reavis (1883-1970) entered the education profession after graduating from Warrensburg Missouri State Teachers College in 1906 and the University of Missouri in 1911. He went on to earn an M.A. and a Ph.D. at Columbia University. Dr. Reavis served as assistant superintendent of schools in Maryland and dean of the College of Arts and Sciences and the School of Education at the University of Pittsburgh. In 1929 he was appointed director of instruction for the Ohio State Department of Education. But it was as assistant superintendent for curriculum and instruction in the Cincinnati public schools (1939-48) that he rose to national prominence.

Dr. Reavis' dream for the Educational Foundation was to make it possible for seasoned educators to write and publish the wisdom they had acquired over a lifetime of professional activity. He wanted educators and the general public to "better understand (1) the nature of the educative process and (2) the relation of education to human welfare."

The Phi Delta Kappa fastbacks were begun in 1972. These publications, along with monographs and books on a wide range of topics related to education, are the realization of that dream.