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ABSTRACT

This paper offers suggestions for using portfolios to assess teacher performance. Key policy decisions that should be addressed prior to preparation of the portfolios include purpose, domains, audience, administrative matters, technical issues, and legal issues. After these policy decisions have been made, guidelines for portfolio design--its compilation, contents, and the scoring process--are described. Portfolios reflect teachers' professional development over time, provide supporting documentation, offer a tool for self-evaluation and reflection, and can be tailored to assess broad or specific teaching assignments. However, they are costly and time-consuming, may not represent teachers' work, are vulnerable to cheating and plagiarism, and may give teachers who have access to superior resources an unfair advantage over others. A conclusion is to use portfolios in conjunction with other assessment methods and to start with caution, preferably using the portfolio as a professional development tool first. A table provides examples of items to be included in a duties-based teacher-evaluation system. (LMI)

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Using Portfolios to Assess Teacher Performance

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The collection of data and information to assess teachers' performance can be done through various avenues. These approaches may include observations, interviews, surrogate tasks, tests, questionnaires, rating forms, videotaping, and portfolios. A teacher evaluation system should have more than one way to collect data and should rely on more than one source of data (e.g., observations by peers, ratings by students and parents, interviews by principals). Portfolios have gained much attention in recent years for the assessment of both teacher performance and student learning. What is not often recognized is that portfolios have been used for many years. As Bird (1990) points out, "the schoolteacher's portfolio would not be as interesting if it were called 'the teacher personnel file.'" This is also true for student folders, a method by which teachers monitor student learning and development.

What then is a teacher portfolio? What it isn't is an instrument to gather data and information, such as a test or a rating form. It isn't simply a repository for, or a collection of, materials. A *portfolio* is a purposeful collection of selected materials by and/or about the teacher.

Teacher portfolios are being used by several states, educational agencies, teacher education programs, and school districts, usually for low-stake purposes such as preservice training, self-evaluation, and professional development. While many agencies are still in the exploratory or field-testing phase (e.g., professional certification of experienced teachers by the National Board for Professional Teaching Standards, beginning teacher licensure in Connecticut, the master teacher program in Texas), some agencies are now using portfolios for assessing performance and evaluating individuals in order to make decisions about successful program completion, licensure, hiring and job assignments, and other personnel decisions (e.g., career ladder programs in Arizona and Tennessee, teacher licensure in Oregon).

Key Policy Decisions

The structure of a portfolio, its contents, and the use of materials in it are determined by key policy decisions that should be addressed prior to its preparation by teachers. These include:

- (1) the purposes of the assessment and the evaluation;
- (2) the domains to be covered, at least in part, by the portfolios;
- (3) the audience who will use the portfolios;
- (4) the individuals who will compile and update the portfolios;
- (5) the individuals who will have access to the portfolios;
- (6) the procedures to be used to protect the materials and the confidentiality of information in and about the portfolio;
- (7) the individuals who will retain the portfolios, where and for how long;
- (8) the types of materials to be included in the portfolio;
- (9) technical issues; and
- (10) legal issues.

Portfolios, as well as other approaches to collecting data and information, can serve many **purposes**. At the school level, they can be used for personnel decision making, program and school improvement and evaluation efforts, staff development programs, and as a source of models and ideas for teachers. A teacher can use his/her portfolio for professional development, reflection, and self-evaluation. An individual, whether currently employed as a teacher or not, can use a portfolio for job seeking, obtaining awards, professional certification, self-evaluation, professional fulfillment, and documenting his/her own career history. When used for development or for formative evaluation, portfolios are often called "working portfolios"; when used for high-stakes decisions, such as hiring or licensing, or for summative evaluations, they are sometimes called "presentation portfolios." Some of these purposes are low-stake ones, but others may have high stakes associated with them. The issue of whether portfolio preparation is a solo or a coached process also needs to be addressed, and is discussed more under "Guidelines for Compiling the Portfolio."

Domains are those broad areas covering an array of teaching behaviors reflected in the performance criteria of the evaluation system. For instance, the domains in the duties-of-the-teacher list include: Knowledge of the Subject Matter, Instructional Skills, Assessment Skills, Professionalism, and Other Services to the School (Scriven, 1991). Although materials in portfolios can apply to any of these five domains (see below), some domains, or elements within the domains (e.g., Management of Process Skills under the domain of Instructional Skills), are better assessed by other means. Shulman (1988) points out that no one approach to assessing teacher performance can cover all domains adequately. The use of portfolios in conjunction with other approaches (e.g., observations, interviews, student ratings) can provide more comprehensive information for use in determining a teacher's level of performance.

The **audience** for the portfolios will determine what materials are to be included. If it is being used primarily by those persons providing professional development and support to the teacher, similar types of materials gathered over extended periods of time should be included. This permits assessment of progress over time on similar attributes of teaching. If the portfolio is to be used by professional certification boards or by administrators for promotion decisions, it will probably include examples of the teacher's best work, since the teacher wishes to demonstrate a high level of performance worthy of special recognition. If the portfolio is going to be used by an evaluator for annual performance reviews, it should include examples of typical work, randomly collected across the school year. This will provide a more comprehensive picture of the performance level of the teacher and whether that level improves or declines over the school year and across school years. It also allows the evaluator to determine if the teacher is adapting and adopting practices to better address the needs of the students and, if student-produced artifacts are included in the teacher's portfolio, whether or not students are making progress toward the curricular goals and instructional objectives. When used in an interview or conference as part of the evaluation process, a portfolio having typical materials from across the school year provides opportunities to question changes in practice and reflect on performance over the full year and across years.

The next four decisions are concerned with **administrative matters**. These issues should be addressed early in the process so that teachers who are compiling portfolios have no surprises at a later date, better understand their responsibilities with regard to preparing portfolios, and have a clearer understanding of who will have access to their portfolio materials and how they will use the portfolios.

These are not easy policy issues to contemplate and must be considered in terms of the entire teacher evaluation policy for the school or district. However, number 8 on the list

above--the **types of materials to be included** in the portfolio--should probably be given the most thought. Numerous possibilities exist including student work, reflective essays by the teacher, and teacher-produced instructional activities. (More examples are in the next section.) Portfolios may become overwhelmingly large and time-consuming for both teachers and evaluators if some limitation is not placed on the types of materials to be included.

Technical issues need to be addressed with any approach for assessing teacher performance, including portfolios. These include relevance to the job of teaching, comparability across teaching assignments and contexts, accuracy and consistency of the scoring process, use of appropriate scoring scales for the intended purpose, reasonable and justifiable interpretations of results, the use of portfolio data in conjunction with other assessment data and information, the combining of portfolio results with other assessment results, and the setting of standards for acceptable performance.

Legal issues include protecting the confidentiality of the teacher and others including the students, ensuring authenticity of the items in the portfolio, addressing the potential for cheating and plagiarism, establishing or providing for appeals processes, complying with union agreements, and protecting against misuse of the results, as well as damage to or loss of any items in the portfolio while not in the possession of the teacher.

Design of Portfolios

After these policy decisions have been made, the guidelines for compiling the portfolio, what specific materials are to be included, and how the materials will be scored or evaluated should be determine.

Guidelines for Compiling the Portfolio. Features of the portfolios may include: designation of materials to be included; whether the process of compiling the portfolio is a solo or a coached effort; whether it is a one-time or an ongoing effort; whether it represents best, typical, or developmental performance; and what development, assessment, and evaluation processes are to be used in conjunction with the portfolios.

Portfolio compilation procedures can be very specific about what materials are to be included. Some fanciful examples may be: a list of instructional activities for the third period of the second Tuesday in November, the first teacher-made test given in January, an essay written by the teacher during the first week of December reflecting on classroom management strategies used the fourth day of school and six weeks later, samples of the homework assignment completed by three students whose names start with or follow "Det" on the alphabetic roster, and a list of all training sessions attended through spring vacation. Or it could be left entirely up to the teacher to decide what to include. It could also be a mixture of specified and unspecified materials.

The materials collected in the portfolio can reflect more than teaching performance. Just as some teachers are good actors when an observer is present, or are able to talk their way through any situation in an interview, some individuals can compile impressive materials to market themselves as outstanding teachers. Is it fair to a teacher who doesn't have such skills to be judged in the same manner as one who can do a great marketing job through a portfolio? If the portfolio is to be a valid representation of a teacher's performance rather than his/her marketing skills, it makes sense for a certain amount of coaching to be provided to all teachers, especially in the early stages of compiling portfolios. As Shulman (1988, 1991) points out, graduate students are coached through their doctoral dissertations, though the student is ultimately responsible for the final

product and mastery of the subject area. The same should be done for teachers preparing portfolios and, as part of the evaluation process, teachers should be asked to explain or clarify items in the portfolio. This may be done in a individual interview and/or in a group setting, such as a staff meeting or a professional development activity.

A portfolio takes a significant amount of time to compile. To stop activities to compile one could be quite disruptive to the instructional process. If teachers are collecting materials over time, they should receive regular reminders to this effect, especially for developmental portfolios. Otherwise large blocks of time (i.e., several weeks or months) might not be represented or possibly only represented by materials prepared long after the events to which they refer took place, increasing the possibility of inaccuracies and omissions. To minimize disruptions to instruction and to improve the accuracy and comprehensiveness of materials and information, the portfolio compilation should be an ongoing process throughout the year.

When being very specific about what materials are to be included (see example above), teachers may put too much effort into those products, thus representing best efforts rather than typical ones. Procedures and policies should be established so that the portfolio materials reflect the type of performance being assessed (i.e., developmental, typical, best). Wolf (1991a) asks, "Should the schoolteacher's portfolio resemble the photographer's, which presents only the very best work, or the pilot's log, in which every flight is recorded? Should the portfolio display all of a person's work--the good, the bad, and the ugly--or only the work of which the person is most proud?" (p. 134)

Portfolios are most helpful when used with other development, assessment, and evaluation processes. Such uses should be identified in the guidelines for compiling the portfolios, and procedures should be given to meet the other uses. These include: meeting the schedules and deadlines for collecting certain materials so that they will be available for use in other assessments, including materials that cover the same lessons or units as other assessments so as to provide a common basis for interpreting the various assessment results, including those materials in the portfolio that will be used to provide background for an observation or as stimulus items for an interview, and including materials related to areas of weakness being addressed by a teacher's plan of professional improvement.

Specific Materials to Be Included. Criteria for determining which specific items to include in portfolios are:

- (1) the relevance to the performance criteria and domains addressed by the assessment and evaluation system;
- (2) the use of materials for which authenticity can be ensured;
- (3) the reliability of the materials as a source of evidence about the teacher's level of performance;
- (4) the usefulness for substantiating or supporting other sources of assessment data;
- (5) the use of the item in other aspects of professional development, assessment, and evaluation processes (e.g., prompts for interviews, examples to track progress in a teaching skill);
- (6) the provision of important evidence that cannot be obtained readily or accurately through other assessment instruments or processes;
- (7) the elimination of unnecessary duplication of other assessment approaches and data sources;
- (8) the added value of each item to other information in the portfolio;
- (9) the time, cost, and other resources required to produce or obtain the item;

- (10) the feasibility of judging the quality of the materials; and
- (11) the protection of confidentiality of data about other individuals.

The portfolio collection must be more concerned with quality and usefulness in the assessment process than with quantity. Materials should be authentic in their portrayal of the teacher's level of performance, and lend themselves to accurate and reliable scoring procedures. Evaluators must be able to make sound judgments, using carefully developed scoring rubrics and performance standards, about a teacher's performance based on the items in the portfolio.

Portfolios can easily get out of hand and become costly, time-consuming, and a useless exercise of collecting and storing. The value of additional items for judging teaching performance diminishes as the number of such items increases, especially if the items are similar. For example, one is not apt to learn much more about a teacher's test-construction skills from four teacher-made tests than three of them, but can such performance be judged accurately by looking at only one teacher-made test? Usually not.

Some items that might be included in a portfolio for each of the five domains of the duties-based teacher evaluation system (Scriven, 1991) are provided in Table 1. These should not be regarded as comprehensive lists of what can be included, but rather as a source of initial ideas. Certainly a portfolio does not have to include this many items. It is important to be selective in what types and how many items are to be included. Portfolio compilation should not consume far more time than warranted and become a meaningless exercise.

Portfolio contents should include: (1) materials produced by the teacher (e.g., list of instructional activities, reflective essays); (2) products of teaching (e.g., student work, videotapes of the classroom); and (3) information from others (e.g., letters from parents, copies of awards, committee lists). Materials may be linked to one lesson or unit (e.g., the list of activities and materials/equipment for each activity, a videotape of the lesson being implemented, three students' maps and reports, and a reflective essay, all on one geography activity) rather than different ones throughout the school year.

Each item can provide evidence on multiple aspects of teaching. For example, the unit plan in the biology portfolios of the Teacher Assessment Project were reviewed for three types of evidence: instructional sequence, justification for including the topic in the syllabus, and a reasoned or descriptive reflection about the success or failure of the unit (Collins, 1990a). A teacher-made test can be used for evidence about assessment skills, knowledge of the subject area, and understanding of the students' test-taking skills.

Materials can be adapted for different teacher assignments. A mentor teacher might be asked to prepare a log of support provided to student teachers and new teachers, or a copy of the plan of assistance for a teacher coping with a group of disruptive students. A resource teacher might include an audio tape of a session working with a small group of students, or notes from a planning conference with another teacher. A special education teacher might include some individual education plans (IEPs), or a student progress report sent to the speech therapist.

The assessment procedures must delineate not only what items are to be included in a portfolio, but also how they will be scored for use in the professional development and/or evaluation of the teacher.

TABLE 1. Examples of Items for Each of the Five Domains in the Duties-Based Teacher Evaluation System (Scriven, 1991) that Could Be Included in a Portfolio

<u>Domain</u>	<u>Item</u>
Knowledge of the Subject Matter	<ul style="list-style-type: none"> Reviews of two possible new text books A list of subject-related courses completed and workshops or conferences attended during the past year A reflective commentary on how to integrate art and science instruction
Instructional Skills	<ul style="list-style-type: none"> A list of instructional activities for a unit Statement of instructional goals and objectives for the year A reflective essay, written at the end of the first semester, on progress toward meeting the instructional goals and objectives Teacher's rationale for sequencing instructional topics Given a math problem, teacher provides three approaches to solving it Given a poem, teacher writes an essay on how different students might interpret it, given their backgrounds Videotape of the teacher presenting a lesson in the classroom A copy of the signed Standard First Aid training card from the Red Cross A list of those school and community sources of materials with which the teacher is familiar and which have been used in the past semester A log on the use of available technology by the teacher and by the students Photographs of three teacher-made displays used in instruction
Assessment Skills	<ul style="list-style-type: none"> Copies of two teacher-made unit tests or summaries of student assessment procedures A copy of the scoring rubrics used for a student project or report An essay describing the teacher's record-keeping system and how it is used to monitor student progress Samples of graded student work with comments from the teacher written on them Samples of the progress reports/letters sent to parents at the end of the first and third quarters
Professionalism	<ul style="list-style-type: none"> Record of participation in the school's professional development program activities this year Log of service, support to other teachers at the school this year Samples of written feedback to students of different backgrounds and ability levels to see if the feedback is fair and reasonable, given the ability level and background of each student Copies of any materials submitted to professional newsletters and journals Information on any awards received related to teaching (e.g., certificate, letter, newspaper article)
Other Services to the School	<ul style="list-style-type: none"> Copies of committee membership lists on which the teacher served this year List of after-school activities that the teacher supervised this year

Scoring Process for Materials in Portfolios. When designing portfolios, it is important to address the scoring process issues. These include:

- (1) whether each piece, selected pieces, combinations of pieces, or the total collection will be scored;
- (2) whether analytic, holistic, or a combination of scoring approaches will be used;
- (3) who will do the scoring and what training they will receive;
- (4) what scoring rubrics will be used to judge or grade each item, and who will develop them and select and/or prepare the benchmarks to go with them;
- (5) who will monitor the judges and ensure the fairness, accuracy, and integrity of the scoring process; and
- (6) what type of scale or system will be used to report the results of the portfolio scoring to the individual teacher and to others (e.g., mentor teacher, evaluator).

Although many schools, districts, and teacher training institutions have started using portfolios, few have put extensive effort into developing solid scoring procedures. "The Stanford Teacher Assessment Project . . . found that the holistic approach allowed teaching to be examined in a more coherent fashion and avoided chopping up the act of teaching into many disconnected pieces" (Far West Lab, 1993, p. 33). Holistic scoring is usually less costly than analytic scoring. For overall performance evaluation, holistic scoring is probably more appropriate, whereas analytic scoring of selected items may be needed for professional development and self-evaluation purposes.

Scoring of portfolio materials is heavily dependent on the professional judgment of those doing the scoring. The need for clear performance criteria, scoring rubrics, benchmarks, and rating guidelines is critical. The selection of scorers must consider the degree of knowledge and experience needed with regard to the subject area, the types of students, and the school context. Thorough training and monitoring of scorers must be part of the portfolio assessment and evaluation processes.

The setting of standards is not part of the scoring process per se. The standards indicate what levels of performance or what scores are deemed acceptable for a given purpose. One can score a test, for example, but still not say if that score fulfills a requirement, such as passing a course. Standards should be set as part of the evaluation system's policy, rather than as part of the design for each assessment used in the evaluation process.

The Advantages and Disadvantages of Using Portfolios

There are advantages and disadvantages of using portfolios to assess and evaluate teachers. Several of these are discussed below.

Advantages of Using Portfolios. Edgerton, Hutchings, and Quinlan (1991) identify four reasons to use college teaching portfolios:

First, portfolios can capture the intellectual substance and "situated-ness" of teaching in ways that other methods of evaluation cannot. Second, because of this capacity, portfolios encourage faculty to take important, new roles in the documentation, observation, and review of teaching. Third, because they prompt faculty to take these new roles, portfolios are a particularly powerful tool for improvement. Fourth, as more faculty come to use them, portfolios can help forge a new campus culture of professionalism about teaching. (p. 4)

In terms of using portfolios compared to other data collection approaches (e.g., observations, interviews, tests), portfolios can contain a variety of materials (as illustrated in Table 1), can reflect many of the tasks of teaching (in and out of the classroom), and can provide evidence for several domains.

Portfolios reflect the complexities of teaching and can provide flexibility and latitude for various types of teaching assignments. It is difficult to observe teachers who work with very small groups of students with special needs, or to observe resource teachers or short-term substitute teachers. It may not be feasible to observe teachers in very crowded classrooms or at off-site activities (e.g., field trips, music competitions, science fairs). Portfolios can be adapted to any type of teaching situation, especially if teachers are allowed to include items beyond what is specified for inclusion.

Portfolios can include evidence not readily available through other approaches. These may be letters from peers or parents, samples of students' work, awards, and copies of publications and products. They lend themselves to the collection of evidence from multiple sources (e.g., the teacher, students, peers, parents, supervisors, trainers, mentors, newspapers, project reports).

Portfolios encourage self-evaluation, reflection, self-improvement, and professional development. Bird points out that for new teachers, "a portfolio procedure could provide occasions to plan, monitor, support, and record the new teacher's attainments" (1990, p. 244). In their study in Ohio, Berry et al. (1991) found that keeping portfolios helped new teachers develop classroom management skills, content pedagogy, command of the subject matter, student specific pedagogy, and professional responsibilities. For both new and more experienced teachers, "A portfolio procedure could provide colleagues something concrete to admire, a discipline for assembling the evidence, an audience to admire it, and an occasion for doing so" (Bird, 1990, p. 245). Persons involved in the scoring of portfolios have an opportunity "for cultivating new and richer ways of thinking about and inquiring into the scholarship of teaching" (Edgerton et al., 1991, p. 6). It can be a professionally rewarding and enlightening experience (McRobbie, 1992).

Portfolios, then, can increase the coverage of teacher behavior when used with other assessment methods. They can provide increased situational specificity for the setting or context within which the teacher is working. They can be tailored to different teaching assignments. Portfolio compilation provides opportunities for increased professional development, motivates teachers to improve, promotes self-evaluation, and increases the understanding of the teaching profession.

Disadvantages of Using Portfolios. Despite the many advantages of portfolios, there are also disadvantages, many related to the implementation of their use. "Portfolios are messy to construct, cumbersome to store, difficult to score, and vulnerable to misrepresentation" (Wolf, 1991a, p. 129). Some of these problems are more likely to occur in high-stakes evaluation programs than with low-stake uses such as self-evaluation and professional development.

In terms of portfolio content, some items may not be representative of the teacher's work, as specified in the evaluation procedures for selecting items to include. Although the procedures may call for typical items, teachers might put in their best examples or items that reflect most positively on them (e.g., sample work from the best students in the class, favorable letters from parents).

Compilation of an attractive portfolio can affect the scoring process. Some teachers know how to package materials and how to market themselves much better than others.

Some may have had more experience at preparing portfolios, especially those from teacher training programs that use portfolios for their students. Some may have access to superior resources, such as experienced videotaping personnel or color laser printers, that allow them to assemble much more polished products. Some teachers may have coaches available to help them with the process, while others have to work in isolation or in a group with others who are inexperienced with portfolios. Bird (1990) points out that, "When the stakes in evaluation are high, they [the teachers] may be led to polish the documentation to a degree that is out of proportion to its function and importance, or even to misrepresent its source" (p. 244).

In high-stake situations, cheating and plagiarism may and probably will occur. Portfolio items may reflect, not what the teacher does, but what the teacher says he/she does. Administrative procedures must specify what assistance is allowed, what resources can be used, what action will be taken if cheating or plagiarism occurs, and what training scorers and evaluators will be given so that they are not unduly influenced by appearance and packaging, and are alert to possible cases of cheating and plagiarism.

The cost of using portfolios can be high and can easily get out of hand. These costs can include time, money, and resources for the teacher, for the school, and for the students. Given the limited resources available to most teachers, teacher motivation plays a major role in the amount of effort devoted to compiling and using a portfolio. Schools must consider costs associated with training scorers to be accurate and consistent over time, the process of scoring the items, space and equipment for storing materials in a secure manner, and updating the items in the portfolios as needed.

Opportunity costs should be considered. If the resources devoted to portfolios get out of hand, students can suffer. A teacher may spend more time developing elaborate lesson plans (if they are desirable items for the portfolio) and little time giving feedback to students or monitoring their progress. Teachers can easily become overly-ambitious in preparing their portfolios, thus overtaxing their energy and interfering with their teaching responsibilities.

Portfolios can become unduly time-consuming and even a useless paper chase if not implemented properly. Based on his review of the literature, Wolf (1990) concluded that, "Previous efforts at assessing teachers through portfolios in licensure and career ladder programs in Tennessee and Florida, for example, indicated that if the portfolio task is too open-ended or ill-defined then the task easily can turn to a paper chase. The portfolios that the teachers submitted in these previous ventures were unmanageably large and unfocused." (p. 13)

Potential disadvantages include lack of representativeness of portfolio items, impact of portfolios appearance on scoring, cheating and plagiarism, high costs to compile and to score, and the possibility of becoming a useless paper chase and a futile exercise.

Conclusions

Portfolios, when used for assessing teacher performance, are a new approach compared to the more traditional ones, especially classroom observations. They can be a valuable addition as a source of evidence on teaching performance. In discussing approaches to teacher performance assessment, Shulman (1988) points out,

Each of these several approaches to the assessment of teachers is, in itself, as fundamentally flawed as it is reasonably suitable, as perilously insufficient as it is

peculiarly fitting. What we need, therefore, is a union of insufficiencies, a marriage of complements, in which the flaws of individual approaches to assessment are offset by the virtues of their fellows. (p. 38)

Although portfolios can be separate from other processes used for teacher development, assessment, and evaluation, they can be useful adjuncts to such processes. They provide a means of collecting samples of various materials that reflect professional development of the teacher over time. They can be used both by the teacher for reflection and individual development, as well as by a mentor or support-provider or trainer to monitor change over time and to plan professional development activities for a teacher. The materials in the portfolio can be used for self-evaluation and also as assessment instruments to be scored for possible use in teacher evaluation.

A portfolio also provides materials for other assessment activities (e.g., background information for an observer, stimulus materials for an interview). The portfolio can be useful in the evaluation process, not only as source of assessment data and information used in this process, but also to provide supporting documentation and evidence for judgments made and for verifying other assessment data and information. When used with interviews or conferences, portfolios make possible an informed conversation about one's own teaching. This encourages teachers to reflect on and critique their own behavior, a process that usually leads to improved performance. It also provides the evaluator with a more solid basis upon which to make informed judgments and decisions.

Simply collecting materials for a portfolio is of little value; the value lies in the use of the portfolio with other assessment, development, and evaluation processes. Portfolios should be used in conjunction with other assessment approaches "as well as a source of evidence not available through other approaches. Portfolios are flawed . . . , but no other method of assessment can equal them in providing a connection to the contexts and personal histories of real teaching." (Wolf, 1991a, p. 136)

Many schools and teacher training programs are using portfolios in a low-stakes manner at this time, primarily for professional development, self-evaluation, and teacher training. Tierney (1992) states that, ". . . moving toward the use of teacher portfolios as a means of assessing teachers for certification or employment seems premature and fraught with danger" (p. 21).

Schools and districts that want to use portfolios as part of the teacher evaluation process should proceed with caution. As a start, they should try using them for professional development and for encouraging teacher self-evaluation and reflection. By having much more information on what is feasible to include, portfolios can be designed to be more useful for understanding teacher performance in various job assignments and school contexts. They then can be scored more accurately and interpreted in more meaningful ways. Portfolios can make a worthwhile contribution not only to the evaluation process, but also to the improvement of teaching and instruction for all students. Once they are accepted and teachers have some experience compiling them, portfolio use in professional development, assessment, and performance evaluation can be more fully implemented.

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