
Portfolio Assessment: An Alternative in Evaluating Student Performance

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Editor's Note

Henderson used portfolio assessment for the first time during the winter quarter 1994 in a senior-level department capstone course. Student reaction was positive to using portfolios for assessing performance at the Columbus campus. Portfolio assessment provided opportunities for:

- Peer review of written work to encourage analytical thinking.
- Continuous revision of written assignments to develop self-evaluation skills.
- Documentation of the student's best work to substantiate their performance.

Abstract

Portfolio assessment is an alternative method of evaluating student performance. Portfolios provide an opportunity for students to display a broader range of abilities when compared to traditional testing techniques. Students assume a more active role in the learning process when developing a portfolio because they must create, analyze, and evaluate their own work. The role of the faculty member also changes from providing information to facilitating the learning process and empowering the learner. Administrators and faculty members in colleges of agriculture should consider incorporating portfolio assessment techniques into their evaluation of student performance.

Faculty members and college administrators are increasingly concerned over the narrowly defined understanding of student performance provided by traditional assessment techniques (i.e., paper/pencil tests). Student assessment should reflect the multiple outcomes of education. Portfolio assessment is an evaluation technique that emerged in the 1980s as an alternative for or companion to traditional testing. Portfolio assessment has been identified as one of the top three curriculum trends of the 90s (Vavrus, 1990). The growing interest in portfolio assessment can be attributed to the gen-

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eral move toward assessment reform and an interest in performance evaluation.

Portfolio assessment is a systematic and organized collection of evidence used by educators and students to monitor growth of the students' knowledge, skills, and attitudes in a specific subject area (Vavrus, 1990). The literature indicates that portfolios provide a means of assessment that is continuous, multidimensional, collaborative, knowledge-based, and authentic (Valencia, McGinley, & Pearson, 1990). Documents and materials included in the portfolios can aid faculty members in assessing student growth, change, prior experiences, and risk taking.

Several issues related to assessing student performance using portfolios have emerged from the literature. The authors have presented these issues in the form of four questions. Each question analyzes the stated issue based upon current literature on portfolio assessment.

Issue # 1 – How can student performance be assessed?

The call for assessment reform is urging educators to consider the context within which learning takes place and to address the full range of student abilities (Vavrus, 1990; Wolf, 1989). Authentic assessment begins when faculty members use multiple methods to assess student learning (Valencia, McGinley, & Pearson, 1990). A variety of evaluation techniques and sources are needed for capturing a more comprehensive and precise picture of student growth (Mathews, 1990; Burnett, 1985). A cross section of student work with multiple samples provides a means of measuring the many different types of cognitive abilities of students (Paulson & Paulson, 1990; Wolf, 1989). Multiple materials over an extended period of time help to document a level of improvement and competence that cannot be gauged by traditional testing. Combining traditional methods of assessing student performance with other contextual and authentic measures aids in enlarging the field of learning outcomes (Wolf, 1989). Assessment by multiple evaluators and a holistic approach to grading provides a more reliable measure of student growth and performance that is normally not found with traditional methods of evaluation (Bishop, 1987; Simmons, 1990). Allowing traditional testing to dictate what constitutes achievement forces educators to confine student performance into very narrow parameters (Paulson & Paulson, 1990). As a wider circle of student experiences and abilities are included in the assessment process, the more likely the development of stu-

dent abilities will be emphasized over achievement (Wolf, 1989). Assessment must include more than one-shot samples of student work on a limited number of abilities. If faculty members can use a variety of methods and techniques to assess learning, then their view of what is learned can be expanded.

Issue # 2 – What is the purpose of using portfolios?

If a more complete and accurate picture of each student's growth is provided by portfolios, then colleges of agriculture should be using portfolios in conjunction with, or in place of, traditional testing techniques (Simmons, 1990). Portfolios should include pieces of work that represent fairly all of the processes and products involved in the students' growth (Jongsma, 1989; Valencia, McGinley, & Pearson, 1990; Paulson & Paulson, 1990). If education deals with multiple cognitive outcomes which require a multidimensional approach to evaluation, then the assessment of student performance should not be limited to traditional techniques (Paulson & Paulson, 1990; Valencia, McGinley, & Pearson, 1990). Vavrus (1990) states that portfolios should not be used just as simple containers of students' work, but as examples of what students consider their best work. Other authors, however, suggest the inclusion of multiple samples of work throughout an academic period that reflect student progress and growth, e.g., drafts, revisions, pre-writing materials, and final papers (Wolf, 1989; Krest, 1990; Valencia, McGinley, & Pearson, 1990). According to Krest (1990), one of the main functions of using portfolios is to provide records of growth and development not only for faculty members and students, but also for college administrators. In addition, by looking at student portfolios, faculty members can assess their own teaching development and performance (Wolf, 1989).

Issue # 3 – How does the role of the student change when using portfolio assessment?

The implementation of portfolio assessment into educational settings requires several new roles for students. Portfolios help to transform students from passive observers to active participants of their learning experiences. Implementation of portfolio assessment enhances student responsibility, enlarges the students' view of what is learned, encourages the processing of information, and creates a developmental point of view of student learning (Wolf, 1989). Developing portfolios for assessing experiential learning gives adult students the opportunity to reflect on life's experiences and to determine how these experiences have molded their judgment, outlook, and personal development (Krueger, 1982; Burnett, 1985). The students become the analysts, evaluators, and interpreters of their learning experiences (Burnett, 1985). Traditional assessment techniques usually do not encourage self-evaluation and reflection by students; assessment comes from an outside source (Wolf, 1989). Through the use of a portfolio, students become self-assessing, self-reflecting and self-disciplined in their own work (Mathews, 1990; Vavrus, 1990; Valencia, McGinley, & Pearson, 1990). If self-evaluation helps students to be directly involved in their own

progress and to assist them in recognizing a broad range of qualities of their work, then faculty members and administrators should no longer have complete control over the evaluation of student performance via traditional testing (Vavrus, 1990). The literature indicates that new responsibilities are assigned to the students when student performance is assessed using portfolios. Some authors suggest that students should be fully responsible for organizing and maintaining the portfolios, selecting materials for the portfolios, and submitting the portfolios (Jongsma, 1989; Dagavarian, 1989; Vavrus, 1990). Students should be encouraged to study and select the pieces of work that best represent their growth in a given area when implementing portfolio assessment (Vavrus, 1990). Students should learn how to focus on the quality of their work, go beyond format and technique, assess progress, and select the pieces that represent their best work (Bishop, 1987; Krest, 1990; Vavrus, 1990).

Issue # 4 – How does the role of the faculty member change when using portfolio assessment?

With the introduction of portfolio assessment, faculty members will assume different responsibilities. Faculty members must clearly define the educational outcomes for their courses and identify the best methods for measuring the outcomes (Vavrus, 1990). Portfolio assessment should not be implemented without a clear understanding of teacher-developed objectives. Faculty members may have to re-design their course objectives to more accurately conform to the types of work required in the student portfolios (Mathews, 1990; Simmons, 1990). College professors must specify what represents exemplary work and communicate their expectations and standards to the students. Assessment criteria developed by faculty members must extend beyond technical concerns of grammar, spelling, and punctuation to higher order concerns of focus and organization (Krest, 1990; Wolf, 1989). If faculty members adopt a portfolio approach to assessment, then they may have to relinquish some of their control of the learning process. The teacher becomes a coach and an enabler and assumes the role of a facilitator of learning rather than the provider of knowledge (Krest, 1990). Portfolio assessment encourages more collaborative efforts between faculty members and students (Wolf, 1989) and faculty members must learn how to help students to assess their own work (Bishop, 1987). When using a portfolio approach to assess student performance, professors become more reflective in their evaluations (Vavrus, 1990). Faculty members must provide written documentation of the quality of work, of progress that has been made, and of suggestions for improvement (Anson, Brown, & Bridwell-Bowles, 1988; Jongsma, 1989; Krest, 1990). As faculty members are involved in the assessment of student portfolios they are forced to rethink their own goals and interests (Krueger, 1982) and to determine what educational outcomes are most important to them. When using portfolio assessment, faculty members begin to view student performance more from a developmental perspective rather than from an achievement outlook (Goldman, 1989).

Implications for Teaching

Student performance should be assessed by considering multiple outcomes of educational programs. A broader picture of growth and development is captured when a full range of student abilities are included in student performance evaluation. Traditional testing provides limited information to educators, not only for the reduced array of criteria assessed, but also a small portion of the student's full range of abilities is included. The role of student assessment should be to capture all the processes and products that are involved in the development and growth of students. Formative and summative evaluations should be the major components of any assessment technique for student performance. If development, progress, and growth of students are considered the main purposes of educational experiences, then the formative component of evaluation should be emphasized when assessing student performance. Students should be allowed to work on several drafts or trials until mastering the educational objectives and faculty members should provide balanced feedback on students' work for enhancing motivation and interest in the subject matter.

The use of portfolios in conjunction with traditional testing provides faculty members and administrators a more complete and accurate picture of student growth. Traditional testing measures only a limited portion of student capabilities at one point in time, while portfolios represent a wide variety of student abilities and growth over an academic period (e.g., quarter, semester, year). Students portfolios should contain not only samples of best work, but also samples that represent the development and progress of students. Including samples of progress help students to reflect and assess their progress an assist faculty members to document student growth. Portfolios provide authentic evidence of what has been produced over a period of time for faculty members, students, and college administrators.

Portfolios should be used more extensively in colleges of agriculture to encourage active student participation in the learning process. Many traditional assessment techniques fail to promote student responsibility and processing of information. In addition, student achievement seems more important than student development when using traditional testing. Portfolios enhance students' self-evaluation, self-discipline, and self-direction. Portfolios force students to see the quality of their work, select their best pieces of work, discern between marginal and excellent work, and provide reasons for their judgment. Furthermore, portfolios provide opportunities for students to work with more freedom and to develop their potential.

Portfolio assessment helps faculty members to evaluate students more on an individual basis. By using a portfolio approach, faculty members can monitor each student's growth and development throughout an entire academic period. The performance of each student can be documented by using a

variety of methods and techniques. The faculty member becomes more student oriented and less subject matter oriented when using portfolio assessment. The assessment of student performance using portfolios forces faculty members to articulate more clearly their objectives, standards, and expectations: they must identify what is meant by exemplary work and to discuss methods for correcting deficient work. Portfolio assessment helps faculty members to go beyond the surface evaluation of student performance and to begin to focus on substantive issues of quality and improvement. The use of portfolio assessment results in the faculty member becoming more of an encourager and an enabler in the learning process. Students and faculty members both actively participate in defining and assessing learning, creating a collaborative approach to the learning process.

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