

Article, "The Ins and Outs of Portfolios"

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Outcome-Based Education Series

The Ins and Outs of Portfolios

By Michael A. Miller

Background

Teaching has often been described as a three step cycle: plan, teach and test. The first step, planning, has been taught as a process of writing behavioral objectives around incremental facts and mini-skills that purportedly add up to the whole. Teaching them has been described as the implementation of teacher-directed activities during which students achieve some form of mastery. Finally summative evaluation, typically a test, checks student achievement. The whole process is described as a cycle, implying that if students have not mastered the material, a looping-back for re-teaching is necessary. In reality, the majority has ruled. In other words the minority that did not achieve mastery during the first trip through material went on with the others because of time pressures and the lack of teacher expertise in personalizing learning in large groups. Tests have largely been measures of mastery of the incremental facts and mini-skills. Rarely has the "whole" been assessed.

Changed focuses have emerged:

Outcomes of Worth

- Developmental outcomes have replaced behavioral objectives as the primary focus of the learning process. Concepts, processes, attitudes and habits of mind are seen by many as more important outcomes than incremental parts. The whole is the target, despite the need to attain some of the parts while getting there.

Holistic Learning and Partners in Learning

- Instructional activities look much more like problem-solution, process-completion and the crafting of products. Whole language approaches and various cooperative

learning strategies exemplify this focus. A facilitative role has replaced the directive role for teachers in many settings.

Authentic and Appropriate Evaluation

- Multimethod, performance-based and formative evaluation is favored over summative testing. Changes in the outcomes and the instructional processes have demanded parallel shifts in evaluation.

A Call For Improved Evaluative Techniques

Evaluation must be a relevant, appropriate and adaptable process that gets at the outcomes of worth in the manner utilized during instruction/learning. Evaluation must stress self-evaluation, the process of making judgments about the worth of one's work for decision-making. Evaluation must be growth-oriented and useful in guiding learning instead of the now-prevalent orientation toward reward and punishment that is typically without instructional value.

Because of the multidimensionality of evaluation, the implied personalization, the need for qualitative judgments, the inappropriateness of "crunching" much of student work into numbers and grades, the need for many people (students, parents and teachers) to take repeated looks over the years, collecting work in portfolios has been recommended.

Three types of portfolios are used. Type 1 portfolios include singular works to demonstrate completed mastery or competence (e.g. one of each of four types of creative writing to show satisfactory competence in each area). Type 2 portfolios include multiple examples of the same type of product to demonstrate growth on developmental outcomes (e.g. four short stories written over a period of time to document growth). "Process-folios" include a piece of work at various stages of completion to document the process used in completion (note cards and list of references, outline, first draft and final draft of a research paper).

Concerns in implementation of portfolio systems have arisen:

What to select for inclusion in the portfolio -- Who picks what? When?

Students and teachers are the most frequent individuals who select work for the portfolio. Because the two may have different ideas why a work should be included, they should share the responsibility. Experts may also make selection or suggestions. "Experts" are defined as individuals typically from outside the class who have special expertise or perspectives on work of a specific type. They have the unique ability to make judgments about work of that type.

What is selected for a portfolio can be defined in several ways. A few common rules are:

- 1) select that which is necessary to demonstrate mastery of the specified outcome, 2) select just enough to be meaningful while still being manageable,
- 3) select items that illustrate unique efforts or characteristics, and
- 4) select items that illustrate patterns of performance (e.g. typical work or exemplary work).

Various types of media are now being collected in portfolios. Folders of hard copy are not new. Audio taped samples of work (e.g. clips of oral readings) are now a common component in portfolios. Photos and videotapes (both typical and computerized), and computer disc formats of student work make complete sense for certain kinds of work.

How to consistently evaluate multidimensional work in order to be fair, instructional and supportive of longitudinal interpretation.

Teachers vary their evaluation techniques from task to task. There is also much variation between teacher's systems of evaluating multidimensional work. This variation (inconsistency) creates difficulty for students trying to understand and internalize characteristics of quality, for parents trying to understand their children's growth and need, and for teachers trying to understand growth. Consistency in evaluative practices will relieve confusion and facilitate learning.

One system typically used to evaluate papers, projects and performances involves product ratings. Product ratings are systems of evaluation that involve the teachers and/or students listing important quality indicators for a piece of work, creating a rating scale based upon that list, and attaching appropriate numbers of points to each rating scale item in order to portray the importance of that particular quality indicator. If all teachers used the same categories of quality indicators, students would soon anticipate and produce quality work much more readily. A modification of categories utilized by Howard Gardner for exhibition evaluation (1990) is recommended. The categories are:

- 1) conceptualization, organization, perception
- 2) technical adequacy,
- 3) accuracy, truth, correctness,
- 4) individuation/creativity, and
- 5) resourcefulness/collaboration.

Again, the indicators within each of the five categories would change developmentally over time and for differing types of work.

Another system of evaluation involves holistic, primary trait scoring. In this system a piece of work is judged on one scale only. The scale typically conveys quality or accomplishment of purpose. If this type of evaluation is more appropriate, it is recommended that one of a menu of four primary traits be used in order to again ease difficulties through consistency. The four are:

- 1) effectiveness,
- 2) coherence,
- 3) consensus, and
- 4) usefulness in aiding comprehension, aiding anticipation or in use as a guide.

Using primary trait scoring systems involves judging a piece of work along a five point scale. Because multiple characteristics are considered at once, complete descriptors and sometimes examples are provided along the five point continuum of quality. These descriptors or examples not only improve consistency in judging, they communicate the meaning of the judgment of quality to others (students, parents, peers, etc.)

[Along with these systems it is recommended that the student also be observed and/or self-monitored in order to receive feedback about behaviors, referred to as "habits of mind" by Grant Wiggins (1989). Examples are perseverance, flexibility, motion, and perception.]

When evaluating pieces for type 1 portfolios, the ratings are made and included. This type of portfolio evaluation is typically considered criterion-referenced since judgments are made with specific quantitative and/or qualitative standards in mind. Type 2 portfolios involve comparison across more than one sample of work. This would involve comparisons of the works themselves as well as comparing the ratings. This type of evaluation is called individual-referenced because comparisons are made between the student's work over time in order to make judgments about growth. Growth is acknowledged in one or more of four types of changes in work:

- 1) improved level of performance on any or all indicators of quality,
- 2) rate or change in rate of growth (often called the slope of the learning curve) the speed with which the level of performance is growing,
- 3) decreasing variability of performance (consistency is desirable), and

4) decreasing amounts of overlap of quality.

How to meaningfully involve students in the determination of quality, empowering them to internalize standards of quality.

Just as an artist's portfolio is a prized possession of the artist, a student should prize and own their work, especially that which ends up in their school portfolios. This can be done through student choice of 1) at least some of the topics studied, 2) the process used for the inquiry, 3) the nature of the resulting product, and 4) which products are subsequently included in the portfolio. Most portfolios include a table of contents and an explanation of what is included and why. This gives a formal opportunity for the student to articulate why their work is meaningful.

As previously suggested, students should be allowed to help identify the criteria within product ratings and holistic scoring systems. This active involvement increases awareness of expectations and dimensions of quality. Students should be given the opportunity to apply the criteria to pieces of work including their own. One critical step often missed is the dialogue about the differences in judgment or perception - the open discussion about differences in perspectives. If taught and practiced across the years, this final step can lead to improved internal standards of quality for the student, improved understanding the student for the teacher and improved communication skills for both.

How to share data with officials that make decisions about students and schools (i.e. schools boards, state departments of education and college entrance officials).

Current systems of reporting student achievement to post-secondary educational institutions and to educational and political governing bodies typically is in the form of norm-referenced standardized test scores. The power of such scores is famous, and has led to teaching to and learning for THE TEST. As outcomes of worth are identified as the targets of learning, it becomes increasingly ludicrous to assess student competence with tests that do not measure up. This dilemma is seen in the lower test scores of students at the Saturn School in St. Paul Minnesota reported just weeks after a presidential visit to the nationally acclaimed "model school of tomorrow."

If student progress is so richly documented in portfolio collection, then an appropriate resolution to the problem described above is to select a subset of those student works that are meaningful in size and nature, appropriate to the needs or decisions, and available across the populations of students or schools being evaluated. Critics state this type of data is cumbersome and time-consuming to analyze. Critics of these critics respond that standardized tests over-simplify the breadth of the individual thus delivering more ease to the user than fairness to those evaluated. Other criticisms abound.

A Sample of Current Applications

- Non-examples Typical cumulative folders
 - Typical Parent conference folders
 - Typical work collections
- Kindergarten portfolios
 - Winnebago mastery matrix - computer database monitoring of learning
 - Bloomington album - milestone/scrapbook model
- Reading portfolios - audio clips, books read log, selected performance assessments
- Curriculum-based measurements logs - brief samples of holistic behavior completing a task, graphed performance monitoring
- Writing portfolios
- Journal-driven portfolios
- Project-driven portfolios - multi-media collections of representative, and/or uniquely important projects
- State portfolios - packaged, uniform selections of each student's work
- College entrance portfolios - representative work from previous school experience, and product completed for the application

A Portfolio-Aided Intervention Model for Graduation Outcomes

- Graduation outcomes: a set of developmental exit outcomes
- Matrix monitoring for 1-12, substantiated with portfolio collections
- Interdisciplinary, project-driven learning (K-12, four per year) used to document growth and accomplishment of outcomes
- Relationship to institutional objectives, personal learning plans, etc.

A Look to the Future: Technology and the Framing of Our Needs

- Computer-consolidated data of any format
- Easy entry
- Easy access
- Repeated interpretation
- Enhancement of self-evaluation and self-knowledge
- Compatibility of technology

References

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Michael Miller, PhD, NCSP, is a member of the faculty of the School of Education at Mankato State University, Mankato MN. He is a contributing editor of the *Communiqué*.