



Using Student Portfolios as a Measure of Teaching Effectiveness

David English and Lisa Lachlan-Haché
American Institutes for Research

JUNE 2016

Using Student Portfolios as a Measure of Teaching Effectiveness

June 2016

David English and Lisa Lachlan-Haché
American Institutes for Research



1000 Thomas Jefferson Street NW
Washington, DC 20007-3835
202.403.5000

www.air.org

Copyright © 2016 American Institutes for Research. All rights reserved.

Contents

	Page
Introduction.....	1
Background.....	1
Use of Portfolios in Teacher Evaluation Systems.....	1
Benefits and Limitations of the Use of Portfolios in Teacher Evaluation	2
Steps for Designing a Student Portfolio System.....	6
1. Select teaching standards to evaluate with the portfolio.	6
2. Determine what combination of artifacts and written teacher reflection entries will be used to demonstrate mastery of the selected teaching standards.....	6
3. Determine a portfolio scoring and evaluation system.	7
References.....	9

Introduction

The 2016–17 budget bill for Ohio includes provisions that modify the alternative framework for teacher evaluation beginning in the 2015–16 school year. Districts may still use the original teacher evaluation framework, but for those districts electing to use the alternative framework, one or any combination of the following components shall be 15 percent of each teacher’s evaluation: student surveys, teacher self-evaluations, peer review evaluations, student portfolios, or a district-determined component. This document provides guidance regarding student portfolios, which are collections of student work selected by teachers and accompanied by professional reflections on the work, intended to demonstrate mastery of instruction-related [Ohio Standards for the Teaching Profession](#). The document also describes how student portfolios are used in teacher evaluation systems throughout the country, benefits and limitations of their use, and steps for the design of a system that uses portfolios.

Background

The use of portfolios of student work to demonstrate teacher development gained prominence in the 1980s, specifically to support preservice teacher education (Goldberg, 2011). The positive impact of portfolio use on the professional growth of preservice teachers is well documented (Anderson & DeMuelle, 1998; Chung, 2008; Snyder, Lippincott, & Bower, 1998). The perceived value of portfolios for teacher candidates led districts to begin to integrate portfolios into school settings on a broader basis and, in the 1990s, student portfolios emerged as a vehicle for assessing and rewarding K–12 teachers (Wolf & Dietz, 1998). By the early 2000s, many districts were using student portfolios for evaluation and professional development (McNelly, 2002) and various studies in that decade took steps toward validating their positive impact on teaching performance, reported learning and student achievement gains, particularly in the context of the National Board for Professional Teaching Standards student portfolio process (Chung, 2008; Sato, Wei & Darling-Hammond, 2008). Although not without implementation challenges, particularly related to inter-rater reliability (Johnson, McDaniel, & Willeke, 2000), various researchers have affirmed the benefits of portfolios in encouraging teacher self-reflection (McIntyre & Dangel, 2009; Painter, 2001; Wolf & Dietz, 1998).

Use of Portfolios in Teacher Evaluation Systems

Student portfolios can add a rich qualitative dimension to teacher evaluation and act as a strong tool for professional development. At least 13 states currently require or encourage the use of portfolios for measuring teacher performance (Center on Great Teachers and Leaders, 2015). A review of portfolio use across districts and states finds that portfolios are used to complement classroom observations and student performance measures for the following purposes:

- **As a demonstration of professional growth in instruction-related teaching practices.** For this purpose, student portfolios should include student work, teacher reflection on instructional standards represented by the work, and evidence of professional growth along those same instructional standards. Evidence might consist of student work or formative assessment results, teachers’ self-reported adjustments to instruction, and teachers’ written feedback to students (see inset for additional sources of evidence).

Evidence to Consider for Inclusion in Student Portfolios

Examples of evidence that demonstrate teacher mastery of instruction-related standards include:

- Student work samples demonstrating progress over time, including written assignments, assessment results, artwork, audio recordings, and/or videotaped performances
- Teacher entries and reflection pieces (see additional inset box)
- Written feedback given to students
- Student reflections, for example, a process journal that captures students' understanding and use of teacher feedback
- Videos of instruction and/or interaction with students related to specific assignments
- Standards-based lessons plans
- Samples of teacher-designed assessments
- Student background and/or demographic information that is relevant to student performance
- Professional development participation and information
- Awards and recognition related to instruction
- Coursework certification

- **As a tool for tracking student progress.** Portfolios also can be used as tools for teachers to review students' midyear progress (or progress at other intervals) and inform adjustments to instruction. For example, portfolios might contain student work from early in the school year demonstrating *understanding* of certain academic standards and from later in the school year demonstrating *application* of those same academic standards. Portfolios often can present artifacts that demonstrate progress in creative tasks, critical thinking, and problem-solving skills in richer ways than can be captured by other evaluation methods. Progress demonstrated by artwork, student reflection, and audiovisual media, for example, might not otherwise be tracked outside of portfolios. For these reasons, portfolios might fill a particular need in tracking performance in elective courses that rely on evidence of student learning outside of written work or standardized assessments.

The remainder of this document focuses on the use of portfolios as a demonstration of professional growth in instruction-related teaching practices.

Benefits and Limitations of the Use of Portfolios in Teacher Evaluation

If considering the use of student portfolios, districts should carefully weigh their benefits and limitations. The following are the most common trade-offs in student portfolio implementation:

- **Portfolios can add a rich, qualitative dimension to teacher evaluation, but are time-intensive to produce and review.** Portfolios can reflect the process of teaching along dimensions that are not observable through classroom observation or summative student performance results. The process of compiling portfolios for teachers, however – from selecting student work samples to reflecting and writing about their teaching practice – can be “extraordinarily time consuming” (Painter, 2001). The resulting portfolio will contain many elements that are likewise time consuming to review and to ensure consistency, the use

of multiple reviewers may be needed. Districts should not implement portfolios without considerable investments in evaluator capacity-building regarding using the district’s scoring instrument (e.g., rubric). Having quality examples of portfolios for both teachers and evaluators to refer to can also help to clarify the process (Painter, 2001).

Teacher Self-Reflection in Rochester City School District, New York

In Rochester City School District, teachers are given two portfolio-related options to count toward the “Other Measures” weighted at 60 percent of their overall evaluation.

One option is a “Structured Review of Student Work” for which teachers reflect on their contribution to student progress across work samples of three students. Rochester stresses that teachers are *evaluated according to their professional growth along teaching standards* by noting that “teachers should remember that they are not being evaluated by how students do on the assignments” and prompts teachers to respond to the following items:

- A. How did the needs of the students in this class affect your planning? Describe any instructional challenges represented in this class.
- B. What were your learning goals for each unit? How were your selected assessments connected to the overall goals of the unit?
- C. Write a separate paragraph in which you describe the following for each of the three students:
 - a. Describe each student’s skills.
 - b. What does the student work indicate to you regarding the student’s progress towards attaining the learning goals?
- D. Write a concluding analysis reflecting on the following questions:
 - a. Comment on the feedback you provided the students.
 - b. As you compare and contrast the student responses to the instructional assessments, what did you learn about each student’s conceptual understanding?
 - c. Based upon the student responses, what would you consider changing as you prepare to teach this instructional unit again?

(Rochester City School Districts, 2015)

- **Portfolios can be used to measure professional growth using a variety of evidence sources across teachers, but robust supports should be in place to ensure that the *criteria for the evaluation of evidence is consistent across students and teachers.*** For a given subject, teachers may have discretion to choose what types of student work best serve as evidence of their instructional contributions. Musical recordings, artwork, student reflections, formative assessment results, performance tasks, and videotaped performances are just some of the various formats that can be captured in electronic or traditional student portfolios. A high-quality rubric that is aligned to teaching standards must be developed to describe varying levels of quality in teachers’ instructional planning and delivery. Portfolio evaluators should participate in calibration sessions to ensure a common understanding, particularly related to how rubric performance-level descriptions should be interpreted. In addition, as is common practice with the evaluation of complex demonstrations, districts should consider having at least two evaluators review each portfolio to calibrate scores. Ohio provides a sample rubric that districts may use or adapt at <http://education.ohio.gov/Topics/Teaching/Educator-Evaluation-System/Ohio-s-Teacher-Evaluation-System/Alternative-Components> (see “Student Portfolio Evaluation Form” on the website).

Developing Rubrics for Portfolio Evaluation Based on Indicators for Ohio’s Standards for the Teaching Profession

One strength of portfolios is their ability to measure performance on dimensions of teacher practice that are not necessarily observable through classroom observations or summative student assessments. The following indicators of teacher performance taken from Ohio Standard for the Teacher Profession 4.2 (“Teachers use information about students’ learning and performance to plan and deliver instruction that will close the achievement gap”) may be adapted for use in a rubric for scoring portfolios. Note that the indicators suggest particular evidence of practice that may be used (e.g., preassessment data, curricula, teacher reflection). Where evidence is not specifically suggested, districts should allow relevant student work and teacher reflection to be used as evidence of meeting various mastery levels.

Teaching Standard 4 Element	Indicators (Teaching Mastery Level)		
	Proficient	Accomplished	Distinguished
Element 4.2. Teachers use information about students’ learning and performance to plan and deliver instruction that will close the achievement gap.	<p>a. Teachers use pre-assessment data and information they have gathered about students’ learning needs and performance to develop appropriate learning activities.</p> <p>b. Teachers adjust instruction based on student learning.</p> <p>c. Teachers identify how individual experience, talents, and prior learning as well as language, culture, and family influence student learning and plan instruction accordingly.</p>	<p>d. Teachers monitor the performance gaps of students within their classrooms and develop interventions that close those gaps.</p> <p>e. Teachers make curriculum and instructional decisions that respond to the immediate teaching context and student needs.</p>	<p>f. Teachers reflect critically on their own and others’ instructional practices to make appropriate curriculum and instructional decisions based on the teaching context and student needs.</p>

- Portfolios can be strong vehicles for professional development, but districts should be careful not to duplicate other professional growth processes.** Portfolios have been observed to be an “open-ended process that pushes [teachers] to revisit their own knowledge and express it in meaningful ways” (Freidus, 1998). Specifically, portfolios usually encourage teachers to think and write about what academic standards to prioritize; how well student assignments or assessments align with these standards; goals for individual students; what quality of work is associated with low-, average- and high-performing students; what feedback to provide students; and what instructional strategies to use. These types of activities may already be embedded in a district’s processes related to student learning objectives (SLOs), Individual Professional Development Plans, Resident Educator programs, or even individualized education programs. It is important that districts do not overburden teachers by replicating these processes in parallel systems. Districts should, therefore, consider whether the introduction of portfolios adds significant value to the professional growth process and, when implementing portfolios, carefully consider which grades and subjects to implement portfolios for and which teaching standards to address.

Focus on Goals in Portfolios for Nazareth Area School District, Pennsylvania

All teachers in Nazareth Area School District are required to maintain professional portfolios that include evidence and self-reflection related to four types of goals: district, building, teacher, and learner. A formative check-in on midyear evidence is included in the process.

Evidence and self-reflection must be included related to the following areas, as organized by goal level:

District goals:

- Ensuring a rigorous curriculum, aligned to standards, that incorporates technology
- Ensuring the intellectual, emotional, physical, and social needs of students

Building goals:

- Ensuring alignment of practice with the Danielson framework

Teacher goals:

- Self-directed goal from options provided by supervising administrator, to include development of an action plan and description of how student growth will be impacted

Learner goals:

- Solving a specific learning problem of particular student(s) or student groups, including pre- and post-work samples

(Nazareth Area School District, 2015)

- **Portfolios can increase educator engagement by giving teachers agency to identify standards and evidence for their own evaluations, but districts should ensure that portfolio evidence is representative of the full range of teachers' work.** A benefit of student portfolios is that teachers can have a voice in the selection of teaching standards evaluated and the forms of acceptable student evidence; however, this aspect of portfolios can be a disadvantage if the portfolios represent only a small number of teaching standards relevant to a given instructor or if student work does not represent a range of student performance levels. Districts should implement rules to ensure that selected evidence and artifacts are truly representative of teachers' experiences. For example, in some districts, teachers are asked to include student work samples from low-, average- and high-achieving students. In other districts, teachers are asked to select which students' samples will be included *prior* to the teachers' reviewing the students' completed work. Decisions such as these should strike a balance between teacher autonomy and fairness to all teachers.

Collecting Evidence for Portfolios for All Student Ability Levels

Districts might provide guidance to teachers to include student work samples from all student ability levels in their portfolios. The Tennessee Department of Education, for example, advises teachers that "An effective portfolio . . . in the arts will contain evidence that reflect . . . student populations of various performance and learning levels. It is unacceptable to submit . . . samples that represent learning from only one group of students. An effective portfolio will contain evidence from students who are Exceptional Learners (both Gifted and Students with Disabilities), Emerging Level Students, Proficient Level Students, Advanced Level Students, and other populations served by the teacher."

(Memphis City Schools, 2011)

Steps for Designing a Student Portfolio System

1. Select teaching standards to evaluate with the portfolio.

Portfolios should be used as just one of multiple measures within a teacher evaluation system. To use portfolios, districts should first determine which Ohio Standards for the Teaching Profession are being satisfactorily assessed by other components of the evaluation system (e.g., classroom observations, student performance measures, SLOs) and which are not, on a course-by-course basis. Then consider which teaching standards are being successfully addressed in existing professional growth processes. Select teaching standards for the district's portfolio system that will close these evaluation and/or professional learning gaps. Districts might identify a “menu” of standards from which teachers might select or allow evaluators, teachers, and students to collaborate on their selection. This decision may be impacted by the characteristics of the teaching population that will use portfolios: Will all teachers compile portfolios, or will only teachers of a particular experience level compile portfolios? Which teaching standards are higher priorities for these two groups of teachers?

Although districts may select which Ohio Standards for the Teaching Profession student portfolios might address, the Ohio Department of Education recommends that student portfolios target elements of the following instructionally-focused teaching standards:

- Standard 1: Students
- Standard 2: Content
- Standard 3: Assessment
- Standard 4: Instruction

2. Determine what combination of artifacts and written teacher reflection entries will be used to demonstrate mastery of the selected teaching standards.

For any given teaching standard, teacher mastery may be evidenced by artifacts and/or teacher self-reflection. A teacher might demonstrate a teaching standard related to progress monitoring of students, for example, by submitting completed formative assessments, results from the assessments, written feedback provided to students based on the results, and self-reflection regarding instructional adjustments made in response to results. Instructions to teachers should list required and optional artifacts to be included and pose specific questions for reflection. Narrowing the scope of the portfolio process, particularly related to artifact collection, is critical to building an effective and sustainable system.

Teacher Entries and Reflection Pieces to Consider for Inclusion in Portfolios

- Instructional philosophy
- Student learning goals (align with SLOs where applicable)
- Rationale for use of particular student assignments or assessments
- Identification of students' strengths and weaknesses
- Instructional strategies
- Descriptions of verbal feedback provided to students
- Descriptions of adjustments to instruction and differentiation based on student performance at beginning of instructional cycle
- Interpretation of how student work throughout the instructional cycle reflects teacher contribution to student progress

Other important questions to consider when determining artifact and self-reflection requirements include:

- **Will the portfolio be electronic or a traditional format (e.g., expandable folders, three-ring binders, hanging folders)?** An electronic format might allow the inclusion of richer materials and increase the efficiency of the creation and evaluation processes, although an electronic format also may create additional challenges in training or implementation. Ohio's eTPES (electronic Teacher and Principal Evaluation Systems) might be used in some districts to collect evidence (see <http://education.ohio.gov/Topics/Teaching/Educator-Evaluation-System/eTPES-Help>).
- **Are there specific academic standards that should be prioritized?** Consider requiring the inclusion of artifacts and reflection entries that address them.
- **How much choice will teachers have in selecting artifacts and topics of reflection?** A combination of required and optional elements should strike a balance between empowering teachers and maintaining a consistent baseline level of evidence across teachers. Teachers may be provided a "menu" from which to select entries. Teachers should be required to justify why they include specific artifacts. This justification can sometimes reveal more about a teacher's contribution to student performance than the actual artifacts (Painter, 2001).
- **Will students play a role in selecting work?** Students benefit when they reflect on and select work that demonstrates their own progress (Painter, 2001). The benefits of their inclusion should be balanced with consistency of approach across students.

3. Determine a portfolio scoring and evaluation system.

Researchers have cautioned against implementing portfolios without having clear criteria for their evaluation (Danielson & McGreal, 2000). It is important then, that districts carefully select or develop an evaluation rubric or checklist. A rubric that uses at least three performance levels is recommended in order to attain meaningful differentiation of portfolio scores across teachers. The criteria of the rubric may be adapted from the rubric sample at the Ohio Department of Education website (<http://education.ohio.gov/Topics/Teaching/Educator-Evaluation-System/Ohio-s-Teacher-Evaluation-System/Alternative-Components>) or from the indicators for

proficient, accomplished, and distinguished teaching in the rubric provided with the Ohio Standards for the Teaching Profession (http://education.ohio.gov/getattachment/Topics/Teaching/Educator-Equity/Ohio-s-Educator-Standards/StandardsforEducators_revaug10.pdf.aspx). It is essential that the required artifacts and teacher reflection prompts are aligned with the criteria for the *highest performance level* of the rubric to ensure transparency and fairness to the teacher. The rubric also should be widely available.

Although there is a considerable subjective dimension to evaluation of portfolio evidence, a well-designed system using at least two raters can ensure accuracy of scores within an acceptable range of disagreement (Goldberg, 2011). It is recommended that at least one rater be in a supervisory role. If teacher experts are raters, then portfolio submissions should be anonymous. As the number of teaching standards evaluated by the portfolio increases, the more difficult it will be to maintain inter-rater reliability. The use of electronic portfolios supports remote scoring, which may increase the pool of qualified evaluators (Goldberg, 2011).

References

- Anderson, R. S., & DeMeulle, L. (1998). Portfolio use in twenty-four teacher education programs. *Teacher Education Quarterly*, 25(1), 23–31.
- Center on Great Teachers and Leaders. (2015). *Databases on state teacher and principal evaluation policies*. Retrieved from <http://resource.tqsource.org/stateevaldb/Compare50States.aspx>
- Chung, R. R. (2008). Beyond assessment: Performance assessments in teacher education. *Teacher Education Quarterly*, 35(1), 7–28.
- Danielson, C., & McGreal, T. L. (2000). *Teacher evaluation to enhance professional practice*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Freidus, H. (1998, April) *Narrative practices: Portfolios in teacher education*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Goe, L., Bell, C., & Little, O. (2008). *Approaches to evaluating teacher effectiveness: A research synthesis*. Washington, DC: National Comprehensive Center for Teacher Quality. Retrieved from <http://www.gtlcenter.org/sites/default/files/docs/EvaluatingTeachEffectiveness.pdf>
- Goldberg, G. L. (2011, May). *Portfolio assessment as a tool for teacher evaluation*. Presentation made to the Maryland Council for Educator Effectiveness. Retrieved from http://marylandpublicschools.org/NR/rdonlyres/69B8F5FC-6A4A-468F-8886-E089A2605AD8/28669/Portfolio_Assessment_Presentation_Outline_051611.pdf
- Johnson, R. L., McDaniel, F., II, & Willeke, M. J. (2000). Using portfolios in program evaluation: An investigation of interrater reliability. *American Journal of Evaluation*, 21(1), 65–80.
- McIntyre, C., & Dangel, J. R. (2009). Teacher candidate portfolios: Routine or reflective action? *Action in Teacher Education*, 31(2), 74–85.
- McNelly, T. A. (2002). Evaluations that ensure growth: Teacher portfolios. *Principal Leadership (Middle School Ed.)*, 3(4), 55–59.
- Memphis City Schools. (2011). *Tennessee arts growth measures system*. Retrieved from <https://www2.ed.gov/programs/racetothetop/communities/tle2-tn-arts-system.pdf>
- Missouri Department of Elementary and Secondary Education. (2014). *Guidance for using student portfolios in educator evaluation*. Retrieved from <https://dese.mo.gov/sites/default/files/Portfolio-Handbook.pdf>
- National Comprehensive Center for Teacher Quality. (2010). *State database of teacher evaluation policies—selecting measures: Additional measures of teacher performance*. Chicago IL: Author. Retrieved from <http://resource.tqsource.org/stateevaldb/>

- Nazareth Area School District. (2015). *Nazareth Area School District professional growth plan*. Nazareth, PA: Author. Retrieved from https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwiljYiy6p_JAhUH8WMKHaoODr8QFggdMAA&url=http%3A%2F%2Fwww.nazarethasd.k12.pa.us%2Fcms%2Flib05%2FPA01000243%2FCentricity%2FDo-main%2F31%2FTeacher%2520Evaluation%2520District%2520Framework%25202013-2014%2520SY.doc&usq=AFQjCNHjFk4Ds51Acf2prWoHIBrZKtdpRg&sig2=cvk7GAWbCv49d7DvUEYz7w
- Painter, B. (2001). Using teacher portfolios. *Educational Leadership*, 58(5), 31–34.
- Rochester City School District. (2015). *Teacher evaluation guide: Annual professional performance review, a framework for professional practice*. Rochester, NY: Author. Retrieved from <http://www.rcsdk12.org/Page/37799>
- Sato, M., Wei, R. C., & Darling-Hammond, L. (2008). Improving teachers' assessment practices through professional development: The case of national board certification. *American Educational Research Journal*, 45(3), 669–700.
- Snyder, J., Lippincott, A., & Bower, D. (1998). The inherent tensions in the multiple uses of portfolios in teacher education. *Teacher Education Quarterly*, 25(1), 45–60.
- Wolf, K., & Dietz, M. (1998). Teaching portfolios: Purposes and possibilities. *Teacher Education Quarterly*, 25(1), 9–22.

ABOUT AMERICAN INSTITUTES FOR RESEARCH

Established in 1946, with headquarters in Washington, D.C., American Institutes for Research (AIR) is an independent, nonpartisan, not-for-profit organization that conducts behavioral and social science research and delivers technical assistance both domestically and internationally. As one of the largest behavioral and social science research organizations in the world, AIR is committed to empowering communities and institutions with innovative solutions to the most critical challenges in education, health, workforce, and international development.



AMERICAN INSTITUTES FOR RESEARCH®

1000 Thomas Jefferson Street NW
Washington, DC 20007-3835
202.403.5000

www.air.org

Making Research Relevant

LOCATIONS

Domestic

Washington, D.C.
Atlanta, GA
Austin, TX
Baltimore, MD
Cayce, SC
Chapel Hill, NC
Chicago, IL
Columbus, OH
Frederick, MD
Honolulu, HI
Indianapolis, IN
Metairie, LA
Naperville, IL
New York, NY
Rockville, MD
Sacramento, CA
San Mateo, CA
Waltham, MA

International

Egypt
Honduras
Ivory Coast
Kyrgyzstan
Liberia
Tajikistan
Zambia