Preparing Your Teaching Portfolio

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Abstract

This paper accompanies a highly interactive panel session, intended to help session participants craft a summative teaching portfolio for use in promotion/tenure evaluations. Specifically, this session will help participants identify key aspects of their personal 'teaching story' (Why do they teach? How did they come to teach what they are, where they are?); to express their philosophy of teaching; articulate claims about their teaching goals, methods and results; and select and display evidence to substantiate their claims. Participants will leave the session with a written outline of critical aspects of their teaching story and philosophy, handouts containing reflective prompts and a framework of claims that could be made about their individual teaching, and a self-prioritized list of types of evidence that could be used to support the claims about their teaching.

Introduction: What Type of Teaching Portfolio are We Talking About?

Teaching portfolios take a variety of forms (e.g., papers collected in a three-ring binder; multimedia-rich electronic documents), are used in a variety of educational settings (from pre-K to post-graduate education), and are prepared for a variety of reasons. For example, a portfolio may be formative in nature, serving as a place for collecting evidence of improvements in teaching, reflections on one's identity as a teacher, or to share experiences with colleagues in an organized way. The main purpose of these portfolios might be described as 'improvement'[1] (both documenting and encouraging improvement). Portfolios can also be summative in nature, designed to showcase examples of a teacher's best work across different educational contexts. The main purpose of these portfolios might be described as 'evaluation'[1]. The purpose of a portfolio and its intended audience guide decisions about the kinds of information to include in the portfolio[1-3]. In the panel session associated with this paper, we will focus on helping participants craft a particular kind of portfolio, described below in answers to some of the planning/guiding questions presented Seldin's book on teaching portfolios[3].

> **"What is your primary purpose in creating the portfolio?"**
> We will assume that session participants are creating summative teaching portfolios, to be used in formal promotion/tenure review processes.

> **"Who are your primary readers?"**
> We will assume that portfolios will be read by a group of tenured faculty who are participants' institutions, but who are unlikely to be well-versed in participants' scholarly disciplines or well-acquainted with participants' teaching.

> **"What evidence will they expect to find?"**
> **"What types of evidence will be most convincing to those readers?"**
> We believe that every academic institution makes some attempt to formally articulate expectations regarding teaching and promotion/tenure. We also anticipate that many academic institutions also have unwritten expectations regarding the importance of teaching to the promotion/tenure process and how to present one's teaching effectiveness for promotion/tenure

review. In the panel session, we will encourage participants to follow both the written and unwritten rules at their individual institutions regarding documentation of teaching effectiveness.

A final introductory note: although our panel session will focus on summative/evaluative portfolios, we strongly believe that reflective components and narratives of improvement can be meaningfully included in such portfolios, as we will describe below.

Contents of the Teaching Portfolio: Context, Claims, and Evidence

We like to describe the general contents of type of portfolio under consideration as *context, claims,* and *evidence.* Providing some context will help reviewers – who, at some point during the promotion/tenure review process, are likely to be members of diverse scholarly disciplines – understand the challenges and achievements of teaching in a portfolio author's field. Summative portfolios for evaluation should also clearly state the specific claims that the portfolio's author is making about their teaching effectiveness. Finally, each claim should be justified with evidence: artifacts, data, information, examples, etc. that will support the author's claims.

One major tool for providing *context* in a portfolios is a statement of a philosophy of teaching. Resources on creating teaching portfolios often include prompts that can be used by portfolio authors as a basis for self-reflection and expressing the things they believe about teaching, learning, and their role(s) in the teaching/learning processes. For example, "What are your beliefs about teaching? What are your aims for students, and why are these aims important to you? How do your actions as a teacher reflect your beliefs about teaching and learning?"[3] Portfolio authors could also adapt guidance intended to help students creating learning portfolios to their situation, and utilize prompts such as "What have I learned? Why did I learn?"[4] (about teaching); "What difference has the learning made in my intellectual, personal, and ethical development?"[4] (as a teacher); "How does what I have learned fit into a full, continual plan for learning?"[4] (for teaching, for professional development, etc.) The panel session speakers have had success in using (and in helping other portfolio authors create) an additional tool for providing context: the author's personal 'teaching story.' We consider someone's teaching story to be, in essence, the answers to fundamental questions such as: Why do they teach? How did they come to teach what they are, where they are, how they are, who they are? What decisions, values, experiences brought them to this particular point in time?   Some people who find it difficult to start writing a 'philosophy of teaching' – possibly due to the implied formality of such a statement – find it easier to begin by writing about their personal teaching story. This narrative can be less formal, it is often grounded in life experiences with strong memories and emotional involvement, and telling a story can be a more comfortable, natural form of communication than preparing a formal statement. The portfolio author can then examine their teaching story and identify the core beliefs, values, and ways of viewing the world that were critical to their story – which constitute key aspects of their formal philosophy of teaching. Participants in the panel session that this paper accompanies will leave the session with an outline of critical aspects of their personal teaching story and philosophy.

The *claims* of a teaching portfolio are essentially what the portfolio author would like an evaluating committee to believe after reading the portfolio, so it is worth spending time to articulate these claims simply and clearly. At a minimum, these claims need to be immediately

and obviously related to – if not drawn directly from – the written criteria for evaluating teaching for the purposes of promotion and tenure in the portfolio author's faculty handbook. It is additionally important for authors to consider and adhere to their institution's unwritten rules about the kinds of claims and evidence that should be submitted for promotion and tenure evaluation. Other types of claims may be important to a given portfolio author as well. For example, a faculty member who initially faced teaching challenges might choose continual improvement as a major portfolio theme. Others might choose excellence in a pedagogical specialty, such as successful implementation of new technologies for teaching, or in teaching successful laboratories. Ideally, the claims can be related in some way to the portfolio author's teaching story and philosophy. Participants in the panel session that this paper accompanies will leave the session with handouts containing reflective prompts and a framework of claims that could be made about their individual teaching. As the author decides what they intend to claim about their teaching, they should also think about what kinds of evidence they can provide to support such claims.

The *evidence* selected for inclusion in a teaching portfolio needs to be carefully curated. First and foremost, faculty need to be selective in terms of volume: a summative teaching portfolio for promotion/tenure review should not be a multi-volume encyclopedia. Faculty need to choose evidence that is congruent with their personal 'teaching story' and philosophy, and that meaningfully demonstrates their claims. Portfolio authors should consider providing multiple types of evidence for their claims[3], especially for critical claims that are closely linked to the requirements for promotion and tenure. For example, while many institutions collect some form of end-of-term numerical teaching evaluation scores, and typically expect to see these scores reported in some fashion in a summative teaching portfolio, the panel session speakers strongly recommend that portfolio authors do <u>not</u> simply rely on reporting such scores. Authors might consider providing additional context for these scores, such as a comparison with aggregated scores from other offerings of the same course, other courses across an academic department or division[2]. Often, student comments are collected in conjunction with numerical teaching evaluation scores; consider pasting the text of those comments into some form of online software (e.g., Wordle[5]) to create a quick 'word cloud,' visually presenting the words that most commonly appear in student comments. Consider conducting a frequency analysis of positive and negative themes that appear in the student comments, presenting the results in tabular form within the portfolio, and then writing brief (one paragraph) narratives to respond to the positive and the negative themes. Importantly, consider moving beyond focusing only on student reviews of teaching to include peer reviews[6] of teaching (of course design, of technology use, etc.), samples of course materials you developed/improved/use, evidence of student learning, and more[2,3]. At the panel session accompanying this paper, panel speakers will share handouts listing types of evidence that can be used to support different kinds of claims about teaching, so that session participants can plan to collect and present types of evidence that will be the most meaningful to their individual portfolios.

Teaching Portfolios: Complicating Issues

Creating a summative teaching portfolio is an open-ended, often ill-defined task, with important consequences. Technical, professional, and emotional issues can complicate matters and combine to make the portfolio creation process a frustrating experience, rather than an

opportunity for introspection and deepening one's understanding of and commitment to the profession of teaching. For example, portfolio authors might consider creating electronic teaching portfolios, if permissible by institutional guidelines and if creative and effective use of technology for teaching and learning is part of an author's 'teaching story.' Broadly speaking, an 'electronic portfolio' may consist of anything from a pdf document with linked text, to a full web-hosted multimedia experience with video artifacts[7,8]. However, given the various pressures associated with creating a summative portfolio, the panel session speakers recommend avoiding the additional pressure that comes with using unfamiliar technologies while trying to meet an approaching deadline. If an author creates a technology-rich portfolio, it is advisable to provide extremely clear instructions for reviewers on how to access/use the incorporated technologies.

Professional and emotional issues come into play when submitting a portfolio for evaluation by colleagues and peers. Evaluating teaching portfolios is a difficult job. As Tigelar *et al.* wrote[9]: "Unambiguous, objective rating of portfolios is difficult to achieve, because the richness and uniqueness of the contents of the portfolio necessitate interpretation and taking account of the context before judgement is passed."[9] Schutz and Moss[10] have presented case studies that demonstrated that "… even when readers generally agree on evidence and on relevant criteria, they can construct different "stories" about the teacher's practice."[10] Some have questioned whether summative evaluations of teaching should include a teaching portfolio[11]. A portfolio author could spend time and energy worrying about issues of reviewer interpretation. The panel session speakers assembled the recommendations given earlier in this paper (regarding context, claims, and evidence) to help reduce these worries. A portfolio author can influence how their portfolio is interpreted by reviewers, by providing context, spelling out interpretations of evidence, and telling a clear overall teaching story.

Facing promotion/tenure review can be a difficult emotional experience. For example, portfolio authors might feel frustration at perceived misalignment of institutional theory and practice in relation to promotion/tenure, discomfort with the open-ended and sometimes ill-defined nature of the evaluation process, discomfort at being evaluated by peers and friends, etc. The panel session speakers recommend that authors allow themselves ample time to create their teaching portfolio (working in short, regular sessions)[12], including time to experience potentially difficult emotions and to let them pass. Preparing for promotion/tenure review is a good time to practice deliberately adopting a positive, reflective attitude; controlling what can be controlled and letting go of uncontrollable issues; and being kind to one's self.

Conclusions
Preparing a summative teaching portfolio for promotion/tenure review can initially seem to be a daunting task. While much of the review process is beyond the control of a portfolio author, the author can control the types and quality of the materials presented as evidence of teaching effectiveness. When an author provides the context of their teaching story and philosophy, makes claims about their teaching that are supported by multiple types of evidence, and deliberately adopts an attitude of self-reflection and self-kindness, then assembling a summative teaching portfolio can be an opportunity for reflection, self-discovery, and renewed commitment to the profession of teaching.

References

1. Wolf, K.P., "Teaching Portfolios: Synthesis of Research and Annotated Bibliography," Office of Educational Research and Improvement, Washington D.C. (available from the Educational Resources Information Center), 1991.

2. Diamond, R.M., Preparing for Promotion, Tenure, and Annual Review: A Faculty Guide. 2nd edition. Jossey-Bass, San Francisco, CA, 2004.

3. Seldin, P., The Teaching Portfolio: A Practical Guide to Improved Performance and Promotion/Tenure Decisions. 3rd edition. Anker Publishing Company, Inc., Bolton, MA, 2004.

4. Zubizarreta, J., The Learning Portfolio: Reflective Practice for Improving Student Learning. Anker Publishing Company, Inc. Bolton, MA, 2004.

5. http://www.wordle.net/ Accessed 12/23/13.

6. Van Note Chism, N., Peer Review of Teaching: A Sourcebook. 2nd edition. Anker Publishing Company, Inc., Bolton, MA, 2007.

7. Barrett, H., "Electronic Teaching Portfolios: Multimedia Skills + Portfolio Development = Powerful Professional Development," Proceedings of Society for Information Technology & Teacher Education International Conference, 2000.

8. Schaefer, G., "Showcase your skills with an electronic teaching portfolio," http://www.learnnc.org/lp/pages/6437 accessed 12/23/13.

9. Tigelaar, D.E.H., Dolmans D.H.J.M., Wolfhagen I.H.A.P., van der Vleuten C.P.M., "Quality issues in judging portfolios: implications for organizing teaching portfolio assessment procedures," Studies in Higher Education, 30(5):595-610, 2005.

10. Schutz, A., Moss, P.A., "Reasonable Decisions in Portfolio Assessment: Evaluating Complex Evidence of Teaching," Education Policy Analysis Archives, 12(33), 2004. http://epaa.asu.edu/epaa/v12n33/ accessed 12/23/13.

11. Buckridge, M. "Teaching portfolios: their role in teaching and learning policy," International Journal for Academic Development, 13(2):117-127, 2008.

12. Boice, R. Advice for New Faculty Members: Nihil Nimus. Allyn and Bacon, Boston, MA, 2000.