Teaching and Learning Portfolios: Literature Background, Implementation Strategy, and First-Hand Implementation Experiences

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Abstract

The subject of teaching and learning portfolios is considered from three standpoints. First, some of the existing published literature on the subject of teaching and learning portfolios is discussed. This discussion shows that while there is agreement about some aspects of teaching and learning portfolios, views on their value differ. Second, the development of the general implementation strategy for the creation of teaching and learning portfolios at the DuBois Campus of the Pennsylvania State University is discussed. It is apparent from these two components of the paper that the creation of teaching and learning portfolios is an emerging requirement at many institutions of higher learning, the DuBois Campus of Penn State being one. Third, the first-hand experience of an engineering faculty member who has created two teaching and learning portfolios is presented. The portfolios discussed were created at two intervals, after the faculty member had completed one and then three years of full-time instruction at the institution, respectively. The two portfolios differ significantly in scope and complexity. The three-year portfolio is more extensive and includes sections on assessment, continuous improvement, and strategic plans that were not part of the one-year portfolio. The one-year portfolio was composed mainly of a statement of teaching philosophy and goals and objectives for individual courses. As the personal experience is detailed, several conclusions and observations about teaching and learning portfolios are made. Those conclusions and observations are then placed in a context relative to the perspectives presented while discussing background literature.

I. Overview and Literature Background

Teaching and learning (T&L) portfolios have been used in academia for many purposes; the most widely recognized are for evaluating teaching, showcasing teaching accomplishments, documenting teaching outcomes and effectiveness, and for creating a strategic timeline for future teaching implementations. The format and presentation medium for T&L portfolios has changed with the evolution of information technology to include electronic T&L portfolios; however, the basic premise for creating a T&L portfolio has stayed constant as can be seen from this more than decade old statement from Edgerton, Hutchings, and Quinlan[1]: "Portfolios can prompt more reflective practice and improvement. This potential for improvement has been cited as the single most-cited benefit of use to date".

There are many who support the integration of T&L portfolios; however, their opinions of what should be included in a T&L portfolio may differ slightly depending on their position in the academic world. Others are more skeptical about the amount of value that should be placed on T&L portfolios and wish to have more hard core research and documentation on the ability of

T&L portfolios to help faculty improve their teaching over time. This difference of opinion can be demonstrated by considering existing literature which discusses T&L portfolios. This discussion should provide the audience with a fair, brief overview of the breadth and depth of opinions on T&L portfolios and their use in academia. It should be noted that despite the disagreement on the ultimate values of T&L portfolios, there is general agreement about the fact that the portfolios should be unique documents. For example Seldin[2] states that T&L portfolios should be "highly personalized products, no two are exactly alike." That there is that agreement is significant because T&L portfolios are created at institutions of higher learning in practically every discipline that exists.

Seldin is one of the most well known advocates of the T&L portfolio. Over the past decade Seldin has published numerous articles, books, and presented workshops which share his thoughts on the effective use of T&L portfolios. There are those who believe that T&L portfolios have their place in academics, but they disagree with Seldin's findings on how effective T&L portfolios can really be in helping faculty to improve their teaching. Burns[3] specifically addresses Seldin's claims. In reference [3] the author questions how effective T&L portfolios are in helping faculty to improve teaching, because their creation is time consuming and it has not been *proven* that they effectively improve teaching. While not denying that T&L portfolios can be helpful, the author of reference [3] states, "What is needed is careful research." Reference [3] also questions an unreferenced Seldin statement which maintains that creating portfolios has benefited "tens of thousands". In response the author of reference [3] states "Such breezy assertions about the value of portfolios raise a number of questions."

Regardless of what you believe a T&L portfolio can help each faculty member to accomplish, the truth is that they are used in academia for many valuable purposes, and they are not likely to go away. The authors of this paper suggest that each faculty member personalize his/her T&L portfolio so that he/she takes ownership over it and forms it into a snapshot of his/her teaching in time. This personalized snapshot is updated and acts as a catalyst to encourage a truly reflective process that will help document teaching strategies, successes and challenges, in much the same way one documents research publications. This recommendation paraphrases that made in reference [2] where the author stated, "It is recommended that faculty think of their portfolios as "special inserts" in their curriculum vitae under the heading of "Teaching." Additional advice can be found in Baume[4] where the author states, "It takes years, even decades, to build a good research career, but it is a record of achievement that is easy enough to document." Reference [4] also provides the following advice to avoid creating a portfolio which seems soulless, "If you want to achieve this richer portfolio, you will need to produce analysis of and reflection on the evidence. To prompt this, here are four questions: What am I particularly good at teaching? Which aspects of my teaching do I need to work on? What fascinates or excites me in teaching? What have I discovered about my teaching?" These are just a few questions a faculty member can begin to explore to add his/her own personal touch to a T&L portfolio.

II. Implementing T&L Portfolios at Penn State DuBois

The DuBois Campus of The Pennsylvania State University began the implementation of T&L portfolios with tenure track faculty. It was the desire of the administration to have faculty document their teaching and illustrate the strong commitment faculty were making to teaching and learning, along with their responsibilities to high quality research, service and outreach. This thinking follows Ernest Boyer's[5] Concept of Scholarship and recognizes that teaching is a form of scholarship at its highest level. Boyer's four interwoven categories include: Discovery (research), Integration (synthesis), Application/engagement (practice) and Teaching (learning). This point of view was expressed in reference [1] in a discussion of teaching as a scholarly act, "At bottom, the concept entails a view that teaching, like other scholarly activities (whether by Boyer's labels or by the more traditional ones of research, service, and teaching) relies on a base of expertise, a 'scholarly knowing' that needs to and can be identified, made public, and evaluated; a scholarship that faculty themselves must be responsible for monitoring." T&L portfolios have bridged an important gap for faculty at Penn State DuBois by providing a place to properly document their scholarship of teaching.

In the fall of 2000 the campus began to research how T&L portfolios had been integrated at other institutions. This research indicated that many institutions of higher learning have also required or highly recommended that tenure track faculty maintain a T&L portfolio. While it is impracticable to list all the institutions discovered during our research, Andersen[6] lists 25 universities that require or recommend T&L portfolios.

It is noted that even though the purpose of T&L portfolio implementation and end uses at these institutions were different, they all revealed a similar approach in format. After much research we assembled the main items for inclusion in a standard portfolio, while also realizing that the framework and contents would be flexible for each individual faculty member. The implementation of the initial first year T&L portfolio was similar to a series of course portfolios, and it provided a strong foundation for documenting future growth. The third year T&L portfolios provided a global perspective of a faculty member's approach to teaching overall, common goals, objectives, and instructional strategies, as well a deeper, more reflective look into his/her teaching that documents teaching progress (his/her own perspective and students' perspectives), and a timeline for future implementation and assessment.

III. Personal Implementation Experience - Introduction

Much of the remainder of this paper will describe the first author's experience creating two T&L portfolios. Since the discussion relates to personal experience, much of it will be written in the first person.

As a tenure-track faculty member attempting to be successful in my college, I understand I must create and maintain a T&L portfolio in addition to successfully completing the traditional promotion and tenure (P&T) review process. I have, to date, created two teaching and learning portfolios and have successfully completed the second stage (4-year review) of the tenure process. I created the two teaching and learning portfolios after having taught for one and three years, respectively. While these were created as stand alone documents, they were also submitted as supplemental material along with the normal dossier for the two and four year tenure reviews. As I discuss my experience with the two teaching and learning portfolios, I will draw conclusions and make observations about the process. It should be noted that these conclusions and observations, which are based on my experience, were reached independently of what has been discussed in sections I and II. In addition, I will comment on how the T&L portfolio relates to the P&T dossier because I believe the connection is important.

IV. Personal Implementation Experience – One-Year Portfolio

As I began my second year teaching at Penn State and was putting together my dossier for the two-year tenure review, I was surprised to learn that I was also expected to develop a teaching and learning portfolio. I was informed that my college was now requiring tenure track faculty to create and maintain a teaching and learning portfolio. In fact, I was part of the first group of faculty for which this requirement was being instituted. Fortunately, the campus Director of Academic Affairs (DAA) Robert Loeb, and the Instructional Development Specialist (IDS), Robin Gill (the second author) had collected background material and had two example portfolios that had been put together by campus faculty. This was helpful because otherwise I would have had no idea where to start. Observation #1 – When creating your first T&L portfolio, use the work of others as examples.

The two example portfolios were quite different. One was almost completely narrative, while the other was partially narrative, along with a tree-like structured listing of course goals and objectives. I preferred and chose to use the latter format. When finally implemented, my T&L portfolio was composed of a basic statement of teaching philosophy, a listing of goals and objectives for two courses, a listing of responsibilities and student evaluations, and an appendix of supporting material. The statement of teaching philosophy contained an overall statement of philosophy, an explanation of the operational approach taken in teaching courses, and a reference to supporting material that indicated the success I had accomplished as a teacher. The goals were comprised of an overall statement for each course expanded upon with specific objectives. Finally, supporting materials were included: syllabi, exams and other course materials, and an unsolicited letter from a former student.

While the statement of teaching philosophy was identical to the one used as part of the teaching section of my tenure dossier, the teaching and learning portfolio is much longer than the narrative statement in the P&T dossier. In the case of my 1-year T&L portfolio it was 3-4 times as long, not including the supporting materials. This leads directly to conclusion #1 - Creating a high quality T&L portfolio is a time consuming process. Based on a review of the example T&L portfolios and other material, it was clear that the format of T&L portfolios varies significantly, certainly in comparison to the rather rigid format for the teaching-related portion of the P&T dossier at Penn State. This leads to observation #2 – Compose your T&L portfolio to highlight the most positive aspects of your teaching. Since you have considerable flexibility in how you formulate your T&L portfolio, use that flexibility to your advantage.

As with creating any document, you always want to consider your audience carefully. Your T&L portfolio has many potential audiences, many knowing little about the specific details of your discipline. This means that how well written and organized the portfolio is will be more important to many of the audiences than the content. In my case, I realized that I was an engineer writing a document that would be reviewed by individuals for whom writing was their discipline. Given the greater length of the document compared to the teaching portion of the

P&T dossier, the time required to create a high quality portfolio was significant. Observation #3 –Your portfolio will have many audiences from many disciplines.

My major focus as I put together my one-year portfolio was articulating my existing teaching philosophy, as well as showing how that philosophy affected my approach to teaching my courses and the goals and objectives for the courses. In addition, because of the flexibility of the T&L portfolio format, I included a complementary unsolicited letter from a former student that was sent to the campus administration. This was significant because the rigid format of the Penn State P&T dossier does not allow the inclusion of such a letter.

While the length of this paper precludes inclusion of the entire T&L portfolio, a table of contents is included below. In addition, the electronic portion of the portfolio (appendix is available only in paper form) is available online at the following address: http://www.ds.psu.edu/AcademicAffairs/ID/Portfolios/DSportfolios.htm . It is listed as the 2000 Review Year and updated portfolio for faculty member Dr. William Haering.

Table of Contents – One-Year Teaching and Learning Portfolio

V Personal Implementation Experience – Three-Year Portfolio

About nine months prior to handing in my four-year P&T dossier (roughly 15 months since creating my one-year T&L portfolio), which would include an updated T&L portfolio, my fellow tenure track colleagues, our DAA, and I had a meeting. It was at this time that I learned that the expectations for the three-year T&L portfolio were significantly different than for the one-year portfolio. This revelation leads directly to observation #4 -- T&L portfolios are "living" documents; thus, their length and scope are likely to change with time. The chief difference between the two portfolios was the inclusion of a strategic plan for improvement as well as assessment information into the three-year T&L portfolio. Addressing both of these issues would require significant lead time. From the standpoint of the strategic plan, the lead time is not specifically related to the development of the strategy; rather the lead time is necessary to demonstrate the strategic plan is in the process of being implemented. Of course, I was trying to improve my teaching prior to developing my strategic plan. However, that effort had not been formally written down and structured such that it could be described as a strategic plan. Actually creating a strategic plan forced me to be more thoughtful about the process. Assessment requires significant time for several factors. First, time is required to determine what to assess and how to assess it. Then, a significant amount of time is required to perform the assessment, as well as to compile and interpret the data when it has been collected.

The assessment was performed with major support from the campus IDS. I decided to survey former students that had taken my courses at least a year ago. By limiting the survey to these individuals, enough time would have elapsed since they took the courses for them to have gained a solid perspective on the value and thoroughness of what they learned in the two courses. The assessment was limited to two courses to make the process manageable. These two courses were a subset of the three courses in which I had collected feedback directly from students by way of weekly questionnaires. Because the IDS collected the data, the responses were anonymous, at least as far as I (the faculty member) was concerned. The anonymity encourages the respondents to be as candid as possible in their assessment. The former students were asked a number of questions relative to their general satisfaction with the course and the instructor as well as many specific questions about the usefulness of and their level of mastery with particular course topics. In addition, specific feedback was sought about the strengths and weaknesses of the instructor's teaching and assessment methods. After performing the assessment, the IDS provided me with the anonymous responses from my former students.

Many of the challenges in creating the three-year portfolio were very similar in nature to those encountered in creating the one-year portfolio. While the amount of work was greater than with the one-year T&L portfolio, the experience gained with the first portfolio was useful. As described above, in addition to the items included in the one-year portfolio, strategic planning and assessment were to be covered in the three-year T&L portfolio. When completed, the major portion of three-year T&L portfolio (everything except the appendix) was approximately 4 times longer than the one-year portfolio. Again, the entire portfolio is too large to include here, but the expanded table of contents is shown below, and the electronic portion of the portfolio (appendix is available only in paper form) is available online at the following address: http://www.ds.psu.edu/AcademicAffairs/ID/Portfolios/DSportfolios.htm . It is listed as the 2002 Review Year and updated portfolio for faculty member Dr. William Haering.

Table of Contents – Three-Year Teaching and Learning Portfolio

The three-year T&L portfolio can best be understood by comparing and contrasting it to the one-year T&L portfolio already discussed. Most of the basic structure has been retained, but significant components have been added.

The first section has been expanded from an overall statement of teaching philosophy and operational approach to teaching (simply called teaching philosophy in the one-year T&L portfolio) to a narrative statement with four subsections: philosophy, approach, teaching effectiveness, and teaching improvements. The first two sub-sections are nearly identical to what appeared in the one-year portfolio. This should be expected as my philosophy and approach to teaching had not fundamentally changed. Since I then had three times as much teaching experience compared to when I created the one-year portfolio, the teaching effectiveness section was expanded. In the one-year portfolio that component had been comprised of Student Rating of Teaching Effectiveness (SRTE) scores and the unsolicited letter from a former student that was in section V. The teaching effectiveness sub-section of the three-year portfolio included references to the same letter, to SRTE scores, to a peer review, and to two teaching awards I had received. Once again, I was able to take advantage of the greater flexibility of the T&L portfolio format as compared to the P&T dossier. As it had turned out, due to a retroactive rule change, a complementary peer review I had received was not permitted to be included in my P&T dossier. However, I was able to include this review in my T&L portfolio and justify its inclusion by accompanying it with a letter from my division (Engineering) head explaining why he had originally recommended that I use the reviewer. The final subsection discussed efforts to improve my teaching. These efforts included items that had been completed, that were ongoing, and planned for the future. This subsection also discussed my strategic vision for improving my teaching as well as how assessment complemented this process. This included the anonymous assessment done by the IDS as well as other feedback mechanisms that I had instituted myself.

The second section was very similar to the one used in the one-year portfolio, with the exception of the addition of another course. Section three also was of similar format, but expanded to cover what had happened in the preceding two years.

In section four, the first sub-section lists the results of SRTE scores and is identical in form to the one-year T&L portfolio. Sub-sections B through E were new for the three-year T&L portfolio. Sub-section B contained the peer review of my teaching ability that could not be included in my dossier. Sub-section C described specific topic areas in three courses which students had identified as the most difficult to understand. This feedback had been obtained through the use of previously mentioned weekly questionnaires. The information provided insight into areas where critical self assessment of my instruction could lead to the greatest benefit for my students. Sub-section D included charts describing the average numerical responses to questions answered by students in the survey conducted by the campus IDS. This sub-section also included the students' comments submitted in response to additional questions in the same survey. Finally, sub-section E laid out specific plans for improvements to individual courses. This included items that had been completed before, were currently on-going, and were planned for the future. Several of the action plans were developed based on a combination of direct student feedback (subsection C), delayed surveys of former students (subsection D) and self assessment. Using insight gathered with different methods improves the confidence in appropriateness of the action plans established.

Considering T&L portfolios as a whole, I have two additional conclusions. As discussed above, creating a T&L portfolio is a time consuming process. In most cases the actions one chronicles would be done anyway. However, formally writing all this down in a document forces one to pay special attention to the coherence of the efforts. In addition, it provides a snapshot of one's personal view of teaching at a specific point in time. While this view does not tend to change rapidly, it does evolve slowly. When considered later, the portfolio provides evidence of that evolution. These facts lead to two final conclusions about T&L portfolios. Conclusion #2 – Forcing yourself to document your philosophy, approach, results, and plans for your teaching will improve the coherence of all of those components. Conclusion #3 – T&L portfolios provide a snapshot of one's view of teaching at a specific point in time; the value of this becomes apparent later.

VI. Personal Implementation Experience – Summary and Future Expectations

The general observations and conclusions that I have arrived at in creating two T&L portfolios, as mentioned above, were reached independently of what has been discussed in sections I and II. These observations and conclusions have been listed above and are reiterated here:

General Observations

1) When creating your first T&L portfolio, use the work of others as examples.

2) Compose your T&L portfolio to highlight the most positive aspects of your teaching.

3) Your portfolio will have many audiences from many disciplines.

4) T&L portfolios are "living" documents; thus, their length and scope are likely to change with time.

General Conclusions

1) Creating a high quality T&L portfolio is a time consuming process.

2) Forcing yourself to document your philosophy, approach, results, and plans for your teaching will improve the coherence of all of those components.

3) T&L portfolios provide a snapshot of your view of teaching at a specific point in time; the value of this becomes apparent later.

The general conclusions I have reached about T&L portfolios can be used to support either of the existing general perspectives discussed in section I. Conclusions 2 and 3 demonstrate that T&L portfolios are valuable and beneficial. However, conclusion 1 demonstrates that this benefit does not come without a cost. Determining whether the cost of creating and maintaining T&L portfolios outweighs their benefits would require a scientific investigation. What is certain to me is that creating and maintaining a T&L portfolio is a requirement that is not likely to go away. Given that fact, I will work to create and maintain a T&L portfolio which accurately and positively describes my teaching efforts.

I will be preparing a third T&L portfolio which will be submitted along with my final P&T dossier within 9 months of the writing of this paper. I expect that five-year T&L portfolio to be similar in format to the three-year portfolio, with additional information describing developments from the intervening two-years. In preparation for creating that T& L portfolio, I have used periodic questionnaires to obtain direct detailed student feedback for other courses. This information is similar to the information that was included in section IV sub-section C of the three-year portfolio. I expect to again have the campus IDS conduct an anonymous survey of former students for two courses that were not included in the three-year T&L portfolio. Finally, the strategic plan will be updated to reflect developments that have occurred and additional plans for the future.

VII. Overall Summary

This paper has discussed teaching and learning portfolios from three standpoints. First, an overview of published literature on the subject of Teaching and Learning portfolios has been presented. This overview included work that extols the virtues of teaching and learning portfolios as well as work that questions their cost/benefit relation. Second, the intellectual underpinnings and implementation plan for the creation of teaching and learning portfolios at the DuBois Campus of the Pennsylvania State University have been discussed. Third the personal experience of an engineering faculty member who has created two teaching and learning portfolios has been presented. This presentation included the thought process behind and the evolution of the two portfolios, as well as conclusions reached by the faculty member.

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