The Value of a First Year Portfolio Assessment for Faculty and Student Learning[1]

Final Report from the University of Denver Electronic Portfolio Research Team

Jennifer Campbell, Richard Colby, David Daniels, Doug Hesse, Matt Hill, Jeff Ludwig, Heather Martin, Jennifer Novak Ladd, Rebekah Shultz-Colby
Contact: dhesse@du.edu /303-871-7447

January 21, 2011

1. Research question

How effectively does a writing portfolio developed for assessment purposes foster faculty and student learning? Since 2007, students in the University of Denver Writing Program have created writing portfolios at the end of their first year writing sequence. They're required to do so as part of a course assessment process that yields both an internal report to the Writing Program faculty and an external report to the University Assessment Office. While we were reasonably confident that ours is a valid and reliable assessment, we were less certain that this activity had value for faculty and for students. We worried, further, that the value it did have might be shallow or fleeting.

From 2008 to 2010, then, our research team asked a number of research questions, many of them in several iterations. What were the range of teaching practices supporting portfolios in individual sections? Did different practices affect the types of portfolios created and, by implication, students' learning experiences? What strategies did students use to write introductions to their portfolios? Did these strategies vary as faculty used different kinds of prompts? What did students value—or not value—in the portfolio process? Did the portfolio process (assigning, teaching, scoring, analyzing, and discussing) change practices and policies, both at program and individual faculty level?

We recognize that any one of these questions is fertile. However, we believe that the meta question we've imposed on the whole group allows us to leverage many individual findings into something more significant.

2. Main findings

a. Throughout the duration of the study, the portfolio research project has been an engine of change and innovation in the program. The discussion of portfolio findings resulted in us revising some course goals as well as changing the portfolio prompt itself. More

[1] By invitation and necessity, this brief report distills several other reports, many of which we've previously shared with the Coalition group. We're happy to furnish coding rubrics, interview protocols, survey instruments and extensive data tables.

significantly, it changed how many faculty incorporate reflection and self analysis in their courses, not only regarding the introductions students write for their portfolios but also throughout the course.

b. The portfolio process has resulted in a rigorous assessment of the first year writing program that has bolstered the growth of the writing program at The University of Denver. We now have four years of assessment data. Following are selected, comparative findings for the past 2 years to illustrate the kind of insight we've generated. Perhaps just as striking, the writing program has developed a reputation on campus for doing serious authentic assessment, a reputation that has contributed to our receiving 4 additional faculty lines at a time of slim to no growth in hiring at DU.

Trained scorers used introductory essays and evidence essays within the portfolios to determine how well students achieved three primary course goals.

Students demonstrate practical knowledge of academic research traditions (for example, text-based/interpretive; measurement-based/empirical; and observational/qualitative) through effectively writing in at least two of those traditions.

		2010	2009
Level 1	Unsatisfactory	16%	18%
Level 2	Satisfactory	52%	45%
Level 3	Strong	25%	32%
Level 4	Exceptional	8%	5%

Students demonstrate practical knowledge of rhetorical differences between writing for academic audiences and writing for popular audiences, through both analysis and performance.

		2010	2009
Level 1	Unsatisfactory	34%	29%
Level 2	Satisfactory	40%	35%
Level 3	Strong	25%	29%
Level 4	Exceptional	3%	8%

Students demonstrate proficiency in finding, evaluating, synthesizing, critiquing, and documenting published sources appropriate to given rhetorical situations.

		2010	2009
Level 1	Unsatisfactory	24%	11%
Level 2	Satisfactory	47%	55%
Level 3	Strong	25%	29%
Level 4	Exceptional	2%	6%

Combined Findings

Because most portfolios earned different scores for different goal categories, we sought to develop an overall measure to determine the student's overall performance in meeting course goals.

	2010	2009
Poor	19%	14%
Satisfactory	40%	41%
Strong	25%	23%
Very strong	8%	11%
Exceptional:	8%	11%

c. Slightly more than half the faculty have tended to see the portfolio primarily as a program concern and not a student or faculty concern. This is reflected in opinions they have expressed, percentage of course grade coming from the portfolio, and amount and type of instructional time given the portfolio. Reasons for this belief are complex, ranging from poor faculty understanding of the uses, actual and potential, of our portfolio, to a very full set of course goals in a ten-week quarter that mitigates against fuller attention. Even with this, faculty changed the ways they teach the portfolio, including the introductory essay. This finding encouraged us in spring 2010 to permit more faculty agency in setting their own portfolio prompt.

d. Even though our portfolio was developed for assessment purposes, and even though many faculty perceived students as serving primarily programmatic interests, students overwhelmingly reported that creating their portfolio helped them learn. 25 out of 26 students interviewed reported that they achieved at least one learning outcome through the assessment process. More than half said that reflection-in-action helped them grow as writers by seeing their strengths, weaknesses, and changes over the quarter. Another quarter said that a type of reflection-as-presentation helped them see how the papers they wrote were designed to teach the learning goals of the course. Only about a quarter of the students, however, perceived that their professors valued the portfolio process; "valuing" included such practices as the portfolio constituting a significant portion of the final grade, the professor using class time or providing other instruction for creating the portfolio, the professor requiring or strongly encouraging students to turn in drafts of the introductory essay or portfolio, and so on. Many students felt that the amount of time available for portfolio work at the end of a 10-week quarter was insufficient.

e. Table 1 shows that students gravitate toward writing reflective essays over essays that argue that students have met course goals, and a significant number will write in a reflective mode even when instructed to make an argument. Prompts do not make a significant difference in terms of organization.

Table 1
2010 Argumentative Emphasis with Prompts

Portfolio Type	1 Argument	2 Reflection	3 Other	Total
Standard Argumentative	29	26	5	60
Reflective	4	34	1	39
Individual		13	7	20
Total	33	73	13	119

Table 2 shows that students tend to organize their cover essays by paper, regardless of prompt or argumentative emphasis. As we explain below, we allowed faculty individually to choose from a "persuasive" prompt, in which students used their evidence essays to support assertions about their writing; a "reflective" prompt, in which students discussed what they learned and how, with their work as illustration; or a third, approved, prompt of their own devising. We expected that the nature of the directions would shape how students produced portfolios; however, we were surprised. It could be that "reflection" has sufficient gravitational force (or is so familiar to students) that it predominates, especially when not opposed by purposeful teaching.

Table 2
2010 Primary Pattern of Organization

Primary Purpose/Emphasis	By Goal	By Paper	By Skill	Other	Total
Argument	7	26			33
Reflection	1	59	9	4	73
Other		4	7	2	13
Total	8	89	16	6	119

f. Portfolios that were rated highly tended to use an argumentative strategy more frequently than did portfolios that were rated lower. There are several possible interpretations. Most mundanely, our scoring rubric could have privileged an argumentative strategy. Alternatively, more accomplished writers could have used this strategy. Perhaps the ability to make arguments about one's writing in relation to given criteria is a developmental stage.

3. Inquiry processes, including the methods of inquiry that you used and, if applicable, the value of embedding research in your ongoing electronic portfolio practice.

We used multiple sources of information and multiple methods, including: scoring randomly selected portfolios; conducting discourse analyses of selected portfolios; scoring using descriptive rubrics for introductory essays; interviewing students; collected open written responses from faculty; interviewing faculty; and analyzing syllabi.

Phase 1

We collected a random sample of 247 student portfolios completed in June 2008, at the end of WRIT 1133, the second required first year writing course. During fall, we did two kinds of analysis. First, all 20 writing program lecturers scored each portfolio against a rubric we had developed. Second, and more important, members of the research team analyzed the introductory essays that students had written. To do this, we created an analytic rubric to describe the kinds of moves that students made in terms of topics chosen, the ways they used supporting examples, and the ways they discussed these examples. Our hope was to equate certain kinds of moves with certain degrees of learning. To determine this, we coded the essays to capture relationships between assertions, evidence, and discussion. Our descriptive rubric first asked what "Topics" students discussed in their essays, with these topics generated from our course goals, such as writing for one or more academic research traditions (interpretive, quantitative, or qualitative); the differences between writing for "public" versus "academic" audiences; and finding, evaluative, synthesizing, or critiquing published academic sources. For each topic discussed, we then characterized how students ushered evidence from their writing to support their discussion that topic. Finally, we assessed the level of commentary or analysis with which students discussed their writing for the course.

Also in fall 2008, we examined the teaching practices in different sections of the course. We interviewed faculty and then qualitatively coded our notes into the following categories: whether the class included drafting and revision of the introductions, the amount and type of class instruction time devoted to creating the introduction, how fully the course integrated portfolio creation, the prevalence of examples/handouts of model introductions, and how much the introduction counted toward the final course grade.

We then tried to determine if there were any correlations between the types of teachings practices we noted and the types of moves that students made in their descriptive essay. This proved to be a severe methodological challenge. Although we found no correlation between teaching practices and introductory essay descriptions, given the nature our data, we're doubtful they are meaningfully analyzed through inferential statistics.

Phase 2

In June 2009, we once again drew a random sample of 290 student portfolios (from 881 total, in about 70 sections). We analyzed portfolio introductions using the same analytic rubric as previously to describe the kinds of moves that students made. Doing the analysis were five PhD students in English who were hired and trained by one of the DU INCEPR team members, who also did quality control readings.

Following the Coalition meeting in July 2009, we conducted some more detailed analyses of student learning. From the 290 June portfolios, we pulled a stratified, random sample of 25 whose introductory essays were scored "high," another 25 that were scored "medium," and a third 25 that were scored "low." We analyzed these samples to determine if there were differences between the "moves" we detected and their rated overall quality. There were.

Additionally, we invited these 75 students, plus an additional 25 from the original larger pool, to sit for a 30-minute interview for which they would be paid $25. We chose and interviewed 26 students for interviews, which were recorded, then coded and analyzed.

Finally, in fall 2009, we also examined the teaching practices in different sections of freshman composition. First, we analyzed the syllabi for all sections of the course, generating a profile of how faculty presented the portfolio to their students. Second, we asked faculty to describe their teaching practices; however, rather than interviewing we surveyed them using criteria generated from the previous interviews. (Our reason for changing the procedure was expedience: it was simply easier to gather and quantify information through multiple-choice answers.)

We prepared and led a discussion of findings with the entire faculty. One issue raised repeatedly was how different faculty and their students were understanding the nature and purpose of the portfolio, especially the introductory essay. There were two broad "camps." One group understood the introductory essay as primarily "argumentative:" students were to make an argument, with evidence from their own work, that they accomplished the course goals. Another group understood the introductory essay as primarily "reflective:" students were to have the opportunity to discuss their learning in a relatively open-ended fashion that might include weaknesses as well as strengths. As a result of this conversation, we decided to allow faculty to choose between an "argumentative" and a "reflective" prompt, and included a third prompt option that allowed faculty to devise their own. We decided, further, to make these treatment conditions a focus of research.

Phase 3

In June 2010, we pulled a stratified random sample of final portfolios: 60 from classes using the "argumentative" prompt, 40 from classes using the reflective, and 20 from ones using "other." This roughly corresponded to their percentage distribution across all sections. Two members of the research team trained a group of five graduate students to use the scoring and descriptive rubrics that we had used in previous years to rate and describe all 119 portfolios. (One portfolio proved un-scorable.) Raters did not know which prompt was associated with each portfolio. For each cover essay, we also developed a new scoring rubric, determining whether its emphasis was "argumentative" (that is, the student made an argument that he or she had met the course goals, using his or her papers as evidence), its emphasis was "reflective" (that is, the student discussed what he or she learned and, perhaps, how but made few assertions about the quality of their performance), or its emphasis was "other." After all of the scoring and rating was completed, we then looked at the relationship between the prompts given and the strategies followed, with the results as provided above.

4. Value of participation in the Coalition, including specific background, changes in research direction, choice of methodologies, learning from other cohorts or members of Cohort V

Participating in the Coalition functioned as a strong "kick in the pants" heuristic. This occurred mainly through the requirement to complete reports for each of the Coalition meetings. As a result, we did a number of different studies, with several partial and preliminary findings produced over the three-year period. Another heuristic benefit came from being asked to engage with previously published scholarship on electronic portfolios. We benefited from learning about portfolio practices in different types of

institutions and units than ours, and we were cautioned by the kinds of roadblocks and difficulties that some of our cohort members seemed to have in starting their portfolio operations, let alone collecting data. We received some especially valuable input in summer 2009, which resulted in our considerably broadening the kind of data we gathered, including the very practical step of interviewing a number of students.

5. Application to practice and/or dissemination of your research, present and future

Because there has been a prominent assessment dimension to our research, we have been applying our research findings as we've gone. Most notably, we've shared scoring results every fall with the entire writing program faculty, and those findings have been the focus of several hours of conversation each time. We have additionally shared the results of the descriptive analyses, the faculty interviews and open-ended questionnaires, and the student interviews. As a result, we have modified some of our course goals, and we have adopted a policy of allowing faculty to choose the specific portfolio prompt for their section—which became a focus of its own research study, as we've described above. We will continue to do this kind of work, although we will likely focus on different research questions. We have also disseminated some findings on campus, in reports to the university assessment office.

We intend to submit one substantial article based on our research, an article analyzing the functions—both promising and problematic—of assessment portfolios in a large writing program, expanding the main findings we reported here. Individuals or subgroups of us also expect to write a few smaller articles that develop some of the individual findings, including one on the differences in emphasis on reflection versus presentation.

6. Next research questions following the work done during the Cohort

We're interested in doing more research on how students experience the portfolios, so we might pursue the question, "Under what conditions do students perceive creating portfolios as the best learning experience?"

However, frankly, our next concerns regarding the portfolio have less to do with research than with practices. We have raised a serious question whether the nature of our course goals in a ten week quarter seriously compromises the possibilities of portfolios. We face strict technological limits in our current portfolio management system; certain kinds of appealing practices are simply not possible in our current system, including hyperlinked artifacts. We are interested in "career" writing portfolios that might gather artifacts from four points in the students' undergraduate years; we could initiate this as an award process, with students nominating themselves for certificates of achievement by submitting a portfolio.