

VI

Student Learning as Program Evaluation:
Student Portfolio Assessment
in University Studies at
Portland State University

Student Learning as Program Evaluation: Student Portfolio Assessment in University Studies at Portland State University

Judy Patton, Philip Jenks, and Yves Labissiere

Portland State University (PSU) is a comprehensive, urban, public institution in Oregon's largest city. The university has almost 23,000 enrolled students and serves a population of more than 40,000 in credit or non-credit classes each year, including nearly one-third of the Oregon University System's enrolled graduate students. The urban location of the university provides the impetus for engaging with the community as a key part of the curriculum, and PSU has adopted the motto, "Let Knowledge Serve the City." University Studies, the general education program, is a four-year series of learning communities based on interdisciplinary curricula. At the first, second, and fourth years, the learning communities are shaped differently to achieve the program goals at each level. These goals are Communication, Inquiry and Critical Thinking, the Diversity of Human Experience, and Social Responsibility and Ethical Issues. Students demonstrate their learning through portfolios, increasingly in electronic form. Additional information about University Studies is available at www.ous.pdx.edu. Judy Patton directs University Studies. Philip Jenks is an assistant professor and Freshman Inquiry Coordinator in the University Studies Program. Yves Labissiere is a core faculty member in University Studies and has led the effort to use electronic portfolios for student learning and assessment.

University Studies at Portland State

In 1992, Oregon was under severe budgetary stress brought on by the passing of a property tax limitation measure. The legislature put pressure on the Oregon University System to increase faculty productivity, but did not define what that might mean. Portland State's provost, Michael Reardon, under the leadership of then-President Judith Ramaley, held an open meeting to share his thinking that we should define what increased productivity would be. Both Ramaley and Reardon believed that productivity should be described in terms of student learning rather than with such superficial measures as numbers of students in classes or credit hours generated. This would require re-examining our curriculum. To this end, Reardon asked for volunteers to serve on two committees, one to look at general education and another at interdisciplinary curricula.

To those selected for the general education group, he put the question, "[W]hat if anything do you find meaningful about our general education requirements?" The committee overwhelmingly agreed that they did not find the current, traditional distribution model for general education particularly compelling. They could find no philosophy or mission statement to support it, only a menu of credits required in a series of disciplinary areas. At that point, the committee metamorphosed into a research group, exploring the literature on student learning, retention, and general education.

Less than a year later, the General Education Working Group presented a completely new plan for general education to the Faculty Senate and university community, based on recommendations from the literature. The program, University Studies, called for a four-year, integrated, interdisciplinary curriculum, consisting of a series of learning communities with community-based learning infused throughout the coursework. Four goals for student learning (summarized in Figure 1) would underpin the entire University Studies experience.

Figure 1. University Studies Goals

<p>INQUIRY AND CRITICAL THINKING: Students will learn various modes of inquiry through interdisciplinary curricula — problem-posing, investigating, conceptualizing — in order to become active, self-motivated, and empowered learners.</p>	<p>COMMUNICATION: Students will enhance their capacity to communicate in various ways — writing, graphics, quantitative literacy, and other visual and oral means — to collaborate effectively with others in group work, and to be competent in appropriate communication technologies.</p>
<p>THE VARIETY OF HUMAN EXPERIENCE: Students will enhance their appreciation for and understanding of the rich complexity of the human experience through the study of differences in ethnic and cultural perspectives, class, race, gender, sexual orientation, and ability.</p>	<p>ETHICAL ISSUES AND SOCIAL RESPONSIBILITY: Students will expand their understanding of the impact and value of individuals and their choices on society, both intellectually and socially, through group projects and collaboration in learning communities.</p>

Portland State adopted the Working Group’s recommendation in the spring of 1994 and began implementing the first phase of University Studies the following fall with the first-year course, Freshman Inquiry. That year, twenty-five Freshman Inquiry courses were offered to slightly fewer than 500 students. Each Freshman Inquiry course explored an interdisciplinary theme and was developed and taught by five faculty members from different disciplines. The themes that year were “Embracing Einstein’s Universe: Language, Culture, and Relativity,” “The Pluralistic Society,” “Values and Conflict,” “Ways of Knowing Home,” and “The Many Places of Portland.” As these freshman students progressed through the university, the rest of University Studies was phased in. The entire four-year program has been in place since 1997.

The University Studies plan included three other levels, Sophomore Inquiry, Cluster Courses, and Senior Capstones. The middle portion of the University

Studies consists of twenty-seven theme-based clusters that are introduced through term-long Sophomore Inquiry courses. Examples of the clusters are “Family Studies,” “Popular Culture,” “American Studies,” “Freedom, Privacy, and Technology,” and “Global Environmental Change.” Faculty members teach the Sophomore Inquiry courses with graduate student mentors. Each Sophomore Inquiry course introduces the conceptual framework for an upper-division cluster. Each cluster is composed of a gateway course, the Sophomore Inquiry, and a collection of upper-division courses that deepen the inquiry in the cluster areas. Figure 2 shows two examples of student courses of study in University Studies.

Figure 2.
Examples of University Studies Student Course-taking Patterns

<p>Student #1</p> <p>Freshman Inquiry: “Faith and Reason”</p> <p>Sophomore Inquiries: “Popular Culture,” “Global Environmental Change,” “Leadership for Change”</p> <p>Upper-Division Cluster: “Popular Culture”</p> <p>English 307U: Science Fiction</p> <p>Theater Arts 470U: American Film and Culture</p> <p>Music 361U: History of Rock and Roll</p> <p>Senior Capstone: Middle School Involvement—3 credits/term for two terms</p>
<p>Student #2</p> <p>Freshman Inquiry: “Columbia River Basin”</p> <p>Sophomore Inquiries: “Knowledge, Rationality, & Understanding,” “Woman’s Studies,” “Natural Science Inquiry”</p> <p>Upper Division Cluster—“Knowledge, Rationality, & Understanding”</p> <p>Economics 414U, Public and Private Investment</p> <p>Philosophy 300U: Philosophical Methods and Concepts</p> <p>Psychology 300U: Personal Decision Making</p> <p>Senior Capstone: “Intra Personal/Domestic Violence”</p> <p>University Studies 421—6 credits in one term</p>

The final course, the Senior Capstone, is a community-based learning course. The Capstones are courses in which interdisciplinary groups of students work with a faculty facilitator and a community partner to address needs and issues in the metropolitan region and beyond. The Capstone learning communities total six credits. Capstone courses can span one, two, or three terms of work, and each one concludes with a final product such as a report, presentation, technological product, or performance. Recent Capstones include:

- “Effective Environmental Education”—Students examine the preparation and presentation of effective environmental education programs for elementary school children.

What helps students make sense of their general education experience throughout are the four goals of University Studies, the interdisciplinary inquiry, and a continued engagement with active and collaborative learning.

- “Multimedia Production”—Students develop multimedia software for community partners such as Horizon Airlines, Oregon Health Science University, or the Northwest Power Planning Council.
- “Somali Refugees”—In partnership with Lutheran Community Services Northwest, students tutor Somali children in the Portland Public Schools.
- “Nutrition and Hunger in the Community”—In partnership with the Oregon Food Bank, students look at the causes, problems, solutions, and implications of hunger in Portland.

At Portland State, the University Studies program is centered in the learning community idea. In the first two years of the coursework, students meet in main classes and mentor sessions that intentionally stress the value of working collaboratively and fostering community. In the Capstones, students work in interdisciplinary teams that mirror the Freshman Inquiry experience. Throughout University Studies, interdisciplinary teams of faculty plan and deliver courses collaboratively with student mentors. Students remain in cohorts for the entire year in Freshman Inquiry and, when possible, in the Sophomore Inquiry and Cluster Courses. What helps students make sense of their general education experience throughout are the four goals of University Studies, the interdisciplinary inquiry, and a continued engagement with active and collaborative learning.

Assessment has been a central part of the general education program from the start. As the program has evolved, assessment efforts have become increasingly focused on students’ classroom experience and their classroom learning. This chapter focuses on student portfolios, a central assessment endeavor in University Studies.

Assessment History

From the beginning, the General Education Working Group knew that it would be crucial to be able to show that the new program was working and that assessment data would be necessary. Our challenge was to construct an assessment process that would be useful formatively for the faculty and summatively for the program. Our initial research on improving undergraduate education led us to promising ideas about classroom- and performance-based assessment, and the significance of developing student learning outcomes. Yet, for all the talk about learning outcomes assessment in national higher education circles at the time, few people knew how to do it, especially in a large institution like ours. Still, we began with good intentions and a desire to know if the program was achieving its goals.

Several faculty members in the first group teaching Freshman Inquiry came from the arts and from composition/rhetoric, disciplines with histories of student portfolio use. Because these faculty members explained that portfolio creation could give students experience in reflective practice, meta-cognition, and self-evaluation, everyone agreed to use portfolios in all the first Freshman Inquiry courses. We believed these portfolios would enhance learning and contribute to program assessment. The faculty members and mentors shared an interest in understanding the program’s impact. This common interest became the basis for

developing a culture of assessment that warranted a comprehensive program assessment plan.

For the first several years, we focused on gathering formative data for program improvement through focus groups, classroom ethnologies, midterm small group instructional diagnostics (SGID)¹, data from the College Classroom Environment Scales (CCES)², and end-of-course evaluations. Because the program administrators were primarily devoted to program implementation, we did not have time to focus on the collected data. Furthermore, even though portfolios were an established pedagogical feature of University Studies courses from the outset, they were not used for larger program assessment purposes until 1998. At that time, new leadership at the Freshman Inquiry level understood the importance of putting the original vision into practice.

Over the past nine years, we have used our assessment results and experience to revise our assessment plan every year. Because the Freshman Inquiry and Capstone courses were such a departure from the traditional model of general education, it was crucial to look closely at those changes (learning communities, student-centered curriculum, innovative teaching methodologies) to see if they were, in fact, making a difference. The assessment plan we now have in place uses the collection and analysis of different kinds of data as a check-and-balance system. We carry out student surveys, focus groups, and course evaluations to assess how students are experiencing their University Studies courses and to learn what helps and hinders their learning. We also work with faculty members to gather key assignment work samples and student portfolios, which are assessed for our annual program evaluation.

The University Studies Assessment Plan for 2002–03 is as follows:

We carry out student surveys, focus groups, and course evaluations to assess how students are experiencing their University Studies courses and to learn what helps and hinders their learning.

Figure 3.
University Studies Assessment Plan

University Studies Assessment Activities AY 2002–2003			
	Fall	Winter	Spring
Freshman Inquiry	<ul style="list-style-type: none"> • Online Prior Learning Survey • Midterm Focused interviews and Free write (new faculty only) • Online Course evaluation 	<ul style="list-style-type: none"> • Midterm College Classroom Environment Scales (new faculty only) • Online Course Evaluation 	<ul style="list-style-type: none"> • Online Post Learning Survey • Online Course Evaluations • Student Portfolio Review
Sophomore Inquiry	<ul style="list-style-type: none"> • Midterm Online SGID • Online Course Evaluations • Key Assignment Assessment* 	<ul style="list-style-type: none"> • Midterm Online SGID • Online Course Evaluations • Key Assignment Assessment* 	<ul style="list-style-type: none"> • Midterm Online SGID • Online Course Evaluations • Key Assignment Assessment*
Capstone	<ul style="list-style-type: none"> • Pre- and Post-Surveys • Course Evaluations 	<ul style="list-style-type: none"> • Pre- and Post-Surveys • Course Evaluations • Key Assignment Assessment* 	<ul style="list-style-type: none"> • Pre- and Post-Surveys • Course Evaluations • Key Assignment Assessment*

*Key Assignment Assessments at the Sophomore Inquiry and Capstone levels continue in a pilot phase.

We also work with faculty members to gather key assignment work samples and student portfolios, which are assessed for our annual program evaluation.

We have developed specific assessment strategies for each level of the program to take advantage of the type of class and intended outcomes and to serve its needs. The various strategies and reasons for using them are as follows:

- Pre- and Post-surveys
 - Freshman Inquiry. We designed the Prior Learning Survey to help faculty members and mentors find out who their students are and what they bring to the class. The survey asks basic demographic questions, and gauges attitudes and intentions about students' educational and career plans. In combination with the post-survey, we gain a better understanding of what our students gain through the yearlong courses as well as gathering validating and comparison data for what the portfolio review tells us. In addition, many faculty members use the data sets from these surveys as a first quantitative literacy assignment to assess students' quantitative reasoning background, and to build community as students discover some basic information about their classmates.
 - Senior Capstones. The pre- and-post survey is designed to look at attitudes, experiences, and understandings related to civic engagement and to ascertain impacts of the community-based learning on students.
- Midterm Check-ins: We use focused interviews, free writes, and midterm online feedback throughout the program to ask students what supports their learning, what sets up barriers to their learning, and what suggestions they have for improving the class. Giving these surveys at midterm allows faculty members to attend to any issues or misunderstandings while they can be addressed. The data are sent to faculty members and mentors who are asked to discuss the results with their students and to resolve issues together. The program uses the data to identify larger patterns of classroom successes and problems, and to create resources and plans to support faculty, mentors, or students in making necessary changes.
- University Studies has used the College Classroom Environment Scales (CCES) survey each year to assess student perception of the classroom. This instrument's five scales measure the kind of environment that our program aspires to create. The resulting data, which portrays how students view their classroom environment, have been very useful to faculty members and administrators. Up until this year, the CCES was used at the midterm of the second quarter of every Freshman Inquiry course. Because the data has remained very steady over the past eight years, we now use the survey only in the second term of those Freshman Inquiry classes whose faculty members are teaching in Freshman Inquiry for the first time. Again, the results are sent to faculty members to use to make changes in classroom practices and to discuss with students, if necessary.
- Key Assignment Assessment
 - Sophomore Inquiry – Faculty who teach the Sophomore Inquiry courses design “key assignments” to assess both the University Studies goals and learning outcomes related to their course material. These key assignments (and the ways they are evaluated) will be the next additional major sample of student work in our developing four-year

student portfolios. Since this year (2002-03) is the first year of this assessment, we will certainly make further changes as more faculty members include the key assignment in their classes. The Sophomore Inquiry faculty members and those involved with the program at large will use this information to improve both the individual classes and the program.

- Senior Capstone – We have been working for several years to find an assessment strategy that can capture student learning at this level. Because the final products are created by collaborative student teams, it has been difficult to assess them for individual student learning. The final products are certainly part of the picture but not all of it. At this level, faculty have agreed to pilot a common reflective essay assignment in selected Capstone courses. The assignment asks students to choose one of the University Studies goals and relate the learning in their Capstone experience to this goal. This key assignment, too, will become part of the four-year portfolio.
- Online Course Evaluations – Students are asked about their learning relative to the four University Studies goals, their classroom experience, their content and process learning. There are also evaluative questions about the faculty members and student mentors. The questions, slightly different for each level, are given in Freshman and Sophomore Inquiry and in the Capstones. Shared with faculty and administrators, the results become part of the faculty evaluation process. In combination with the portfolio review and key assignment assessments, this information gives a fuller portrait of what students gain from the University Studies curriculum and what kinds of changes are needed.

Throughout our assessment efforts, our leadership group has worked to clarify what data should be used for formative assessment and for summative assessment. Although some data are used for both, it has been important to distinguish between what data are included in faculty evaluation (for purposes of tenure and promotion) and what are not. In general, the formative assessments done at midterm are used only for program/course improvement and not for faculty evaluation. Faculty need to take risks in these courses without worrying about being penalized. The many midterm, formative assessments (free writes, online feedback, etc.) allow both the faculty members and us to identify any difficulties early enough in the course to work at solving them. The program publishes an Annual Assessment Report that disseminates the assessment data and actions to be taken the following year within the program and with the rest of the institution.

This level of assessment is possible because of the learning community foundation of University Studies. Widespread acknowledgment of the complexity of the students' learning experiences and the agreement to work collaboratively—to understand what is happening in the classrooms and to use that understanding to improve the quality of the program—has been crucial to the way the program works from the classroom through the administration. From the start, our program's foundational agreement has been that if it does not improve student learning, then we should not be doing it. We also have agreed that if our

*Widespread acknowledgment of
the complexity of the students'
learning experiences and the
agreement to work
collaboratively—to understand
what is happening in the
classrooms and to use that
understanding to improve the
quality of the program—
has been crucial to the
way the program works from
the classroom through
the administration.*

assessment effort is not useful and meaningful for faculty, the entire effort will not be sustainable. Faculty members teaching in the program play a central role in designing the assessment activities, trying them out in classrooms, and using the resulting data to improve learning and the student experience.

Student Work Samples as Program Evaluation: The Portfolio

*Using student portfolios
for program evaluation
was planned from the
beginning as a way to
connect program evaluation
directly to student work.*

The Freshman Inquiry student portfolio review is the way we examine student learning. Using student portfolios for program evaluation was planned from the beginning as a way to connect program evaluation directly to student work. The pathway to actually accomplishing this has been as useful as the data. The Freshman Inquiry portfolio review is a valuable faculty development activity. It gives faculty new ways of understanding the program and its goals. For program evaluation, we assess a random sample of student portfolios taken from every course. In the past five years, we have been in transition from “hard copy” paper portfolios to web-based, electronic portfolios, and last year 53 percent of the portfolios were electronic. The portfolios serve primarily to enhance student learning, and secondarily for program evaluation. In the next section, we discuss the rationale and practicalities of using student portfolios as a curricular innovation both to improve student learning and to assess the Freshman Inquiry program.

The Portfolio as Curricular Imperative

One of the most challenging tasks we face in Freshman Inquiry, the general education course lasting over three consecutive quarters, is providing students with a sense of curricular coherence. Freshman Inquiry faculty members and student mentors encourage coherence by building a strong learning community, both among themselves and in their individual classes. Faculty planning time and mentor training prior to the beginning of classes and collaborative work throughout the year are crucial. The quality of community in the classroom directly affects the student’s ability to understand and participate in what is going on in the classroom. Coherence is also bolstered by open, clear, and intentional communication with students regarding the syllabi, themes, readings, and assignments. This level of communication does not happen without the strong trust and relationships that community in the classroom develops.

Despite our best intentions, the many and varied classroom activities (journals, essays, research projects, lab reports, online discussions, web sites, electronic magazines, etc.) can make it difficult for students to hold onto the focus of the course over three quarters. In creating and maintaining a portfolio of work, however, students are asked to do the necessary thinking and synthesis to establish that coherence. Moreover, the practice of making the connections themselves can help students consistently recognize what they have accomplished in the context of the directions and themes of the course.

It is important for portfolios to remain in the hands of the students as much as possible, to maximize student creativity, ownership, and learning. Yet, for portfolios to be used for program evaluation, they need to respond to a common assignment that is used consistently in all our Freshman Inquiry classes. Our aim

is to retain student innovation and creativity in their portfolios while at the same time maintaining the ability to use them for assessment. We have designed a system that maintains the best of both intentions.

Ideally, portfolios provide a map of each student's progress as a scholar and learner. They also can provide a showcase of work for future use in educational and career pursuits. Artifacts such as reflections, essays, passages from journals, and research papers, illustrate student research skills and writing ability. Products of group projects such as work progress logs, group presentations, and reflections on team experiences reflect a student's ability to work collaboratively with others. The practice of documenting and reflecting upon skills, assets, and challenges can give students a sense of mastery and agency in their world. Instead of cataloguing experience on a one-page vita, students can use their portfolios to demonstrate actual skills. Being able to illustrate, rather than simply talk about one's talents to potential employers or admissions officers, makes for a stronger application.

In terms of the learning process, the chief characteristic of the portfolio is the reflection that created it. In the portfolio assignment, students reflect first upon the goals of the course. For each goal, students provide their own understanding of the goal, state its relevance to their education, and specify how to recognize the fulfillment of that goal. Then, for each goal, students identify examples of their own work that best illustrate their progress toward that goal. In essence, then, the portfolio is a collection of reflections on the student's sense of his or her progress toward professional and academic goals. Portfolios also allow students to offer evidence about unplanned or even ineffable outcomes, describing learning above and beyond what was required. (When faculty members discover these unexpected breakthroughs on our portfolio-reading days, they find these value-added aspects of student learning quite wonderful and stimulating.)

Because portfolios provide students' ongoing reflections over the course of the year, faculty members can use them to track the students' intellectual maturation as they move from one quarter to the next. They can provide students with feedback about their strengths and weaknesses. Faculty members frequently remark that these student reflections on their skills and challenges serve as a superb resource for student coaching and advising.

Five years ago, we decided to move from paper to electronic portfolios to solve storage and tracking issues of hard-copy paper portfolio use, particularly with multiyear work. Since University Studies, and specifically Freshman Inquiry, is also responsible for teaching students to use technology, Freshman Inquiry faculty saw electronic portfolios as a way to address several needs. However, what began as a practical solution to paper overload has become a much larger pedagogical concern—and opportunity.

Paper portfolios are linear and generally individual productions. Undergraduates are quite used to putting things in a notebook in an orderly fashion. Traditionally the creation of text is a solo, private endeavor. It is uncommon for students to work together to produce written work. It is difficult to share a paper portfolio with a class or with large group. In addition, traditionally, the private nature of reflective practice reinforces the sense that portfolios should revolve around individual work, and be shared with only the

*The practice of documenting
and reflecting upon skills,
assets, and challenges can give
students a sense of mastery and
agency in their world.*

*Reflection, as part of the
educational process,
is a relatively new experience
for most students and
faculty members.*

most trusted. Reflection, as part of the educational process, is a relatively new experience for most students and faculty members.

Also, assembling portfolio material for a website, and designing the website itself call for radically different sets of skills. The value-added of electronic portfolios stems directly from the way technology and the Internet are used and accessed. The chief activity in developing a web-based, as opposed to paper-based, portfolio is the making of hyperlinks. Hyperlinks are about two things: organization and connections. In the electronic realm, a website's organization and connections are multidimensional. Gone is the page-by-page process for looking at or constructing a portfolio. In its place is a space in which all things—goals, assignments, reflections, presentations, etc.—exist at the same time, wholly or in pieces. Connections and pathways and ways of illustrating those are almost infinite. The decisions about how an audience will make its way through the portfolio site are part of the design and can vary viewer by viewer. In organizing a web-portfolio, students must decide how to arrange the information to focus the viewer's attention first on what is most relevant, by providing a visual index of the core theme and ideas. Recognizing that viewers do not “read” a hyper-linked document as they would read a traditional hard-copy document, they must visually introduce the viewer to the general core ideas and then, by using “hyper-linking,” invite the viewer to explore particular ideas. This movement from the general to the particular, from the central to the peripheral, introduces the students to different levels of analysis and reinforces the practices of making connections between ideas in that multidimensional arena. The shift from one dimension—the paper or the whiteboard—also asks students to “see” connections in a different context.

These characteristics of a website are ideal for fostering the kind of reflection students can achieve with their portfolios. Although paper-based portfolios are not devoid of such possibilities, on the web the ability to engage in shared analysis and to access instant, multiple linkages is enhanced by the technology. A website provides the opportunity for students to step back from the day-to-day assignments and class activities and to see the larger connections among their lives, the course material, and the goals of the program. Because of the thinking required to design the hyper-links in a web-based portfolio, students get explicit practice in communicating the relationships between individual assignments, program goals, and their self- and faculty evaluations. The process itself invites meta-cognitive thinking which Freshman Inquiry faculty report has also increased the students' capacity for deeper learning.

The electronic portfolios document learning insights, depth of reflection, and students' skills. Students can also use the portfolio, a multimedia product, to demonstrate skills and proficiencies with various technologies. For example, designing and building a website (organizing links, choosing graphics, colors, layout, etc.) can demonstrate graphic literacy and design skills in ways that are simply not possible with paper-based portfolios. In addition, electronic portfolios can include student work not included in paper-based portfolios, such as video clips of presentations, performances, and works of art. The capacity for that kind of evidence will only grow as the technology continues to develop. Students

creating electronic portfolios report both excitement and confidence, saying they are learning to be capable in ways they did not believe were possible.

Another key feature of a web-based portfolio is the practice of scholarship as a public enterprise. Putting together a web-based portfolio requires many skills. In addition to thinking through the content, students must think about appearance, navigability, coherence, and the communication of the portfolio in the visual, oral, and written forms. In designing the home page for the site, students often turn to their classmates to evaluate the design and the site in its entirety. A student who is not strong in aesthetics may consult with another for advice on graphic design. These informal collaborations build community, leverage the talent pool of the class, and, most important, communicate the idea that scholarship is a public enterprise. Sharing designs, trying out ideas, and giving one another feedback foster the practice of seeking community and feedback as part of the learning process.

A related practice that further reinforces the public nature of scholarship is the class portfolio review and evaluation, a practice that did not develop in the Freshman Inquiry program until electronic portfolios were used. It is easier to share electronic portfolios by projecting them for the class to see because of the commonly held public nature of electronic documents and Internet information. Sharing reflections, as discussed earlier, has not commonly been seen as a public endeavor. The annual portfolio review was problematic at first for those faculty members who cultivated the private elements of a portfolio process. However, the very nature of electronic documents as a more public artifact creates the ability to generate public activities around them and counters the sense that portfolios are private documents. While students have complete control over what they share in their presentation portfolios, students celebrate each other's work, pick up tips, give advice, and create a corporate coherence for the course curriculum. Because this is a public activity, students must think about audience: audiences' expectations, knowledge, and expertise in terms of navigation. Exercises such as the portfolio review allow students to confront embarrassment and affirm intelligence. Practices that make scholarship more transparent allow students to see others with the same struggles, making them less alone, afraid, or embarrassed about the challenges. It also allows them to be recognized and valued in those areas in which they excel. The criteria for what constitutes good work and even excellent work become visible, meaningful, and achievable.

Support and Resources

From the inception of electronic portfolios, Freshman Inquiry faculty members and mentors had training to enable them to integrate technology into their courses. Although the peer mentors actually do the major teaching and coaching of students as they learn to create their web portfolios, the more faculty understand and use the technology themselves, the more effectively they design their assignments using technology. Because most faculty members were quite familiar with technology, they were generally excited about the idea of using electronic portfolios. Many courses already used website design for various kinds of assignments—photojournalism, personal websites, or newsletter projects. The electronic portfolio not only made sense, it provided an organizing structure for

*While students have
complete control over what
they share in their presentation
portfolios, students celebrate
each other's work, pick up tips,
give advice, and create a
corporate coherence for the
course curriculum.*

*We quickly discovered that we
needed to ground our rubrics in
our context, in the actual
classroom work and language
from particular assignments and
reflective essays.*

the existing work in technology that was meaningful and exciting for students and faculty.

With the support of a grant, we brought together a group of faculty members who volunteered to create a process for the shift from paper-based to electronic portfolios. Yves Labissiere worked closely with staff members from the Office of Instructional Technology, an institutional resource for the integration of technology into teaching, to design a flexible template. This template enabled the less technologically proficient to access the format and the “whiz kids” to show their stuff. The software, Frontpage, offered capabilities for both entry-level and advanced students, and worked well with WebCT, the electronic classroom tool in use across the institution. The WebCT classroom management software provided for the control of privacy; that is, students easily log into this system and make their own decisions about what they want as private and public.

Labissiere designed and led a faculty development institute on the use of WebCT, FrontPage, and electronic portfolios themselves. The first group of student electronic portfolios was implemented in classes during AY 1999-2000. Each succeeding year, more faculty members have adopted electronic portfolios. The plan is to have all Freshman Inquiry course portfolios completely electronic by the end of 2003-04.

The Portfolio as Program Evaluation: The Review Process

The impetus for reading samples of Freshman Inquiry portfolios is to see evidence of student learning related to the general education goals. Each Freshman Inquiry course should address all four goals and students’ progress toward them. The review process builds faculty competence in outcomes assessment and fosters understanding of the general education program among university faculty. To that end, during portfolio review days each summer, faculty members collaboratively read and score random samples of portfolios (both paper and electronic ones) from each Freshman Inquiry class, all of which share a common end-of-year portfolio assignment. The scoring is done with rubrics developed over the past five years, one rubric for every general education outcome.

Faculty members who teach in Freshman Inquiry and other Portland State faculty designed and refined the rubrics for scoring portfolios. At this point, some of the rubrics are quite developed while others are still being modified. Although standardized rubrics from other programs or agencies were too generic for us to use, they did serve as useful guides as we developed our own. We quickly discovered that we needed to ground our rubrics in our context, in the actual classroom work and language from particular assignments and reflective essays. The rubric for critical thinking (Figure 4), for example, has been “tweaked” each year for the past three. It has been used in its various forms each year since the first review, to the point that now it seems the most stable. Having faculty members who teach in the program take charge of the goals, develop the rubrics, and then teach with them in mind, is at the heart of their ownership of the entire assessment process.

Figure 4.

Critical Thinking Rubric Used for the Freshman Inquiry Portfolio Review

University Studies Critical Thinking Rubric

Level Six – Consistently does all or almost all of the following:

- Accurately interprets evidence, statements, graphics, questions, etc.
- Identifies the salient arguments (reasons and claims) pro and con.
- Thoughtfully analyzes and evaluates major alternative points of view.
- Generates alternative explanations of phenomena or events.
- Justifies key results and procedures, explains assumptions and reasons.
- Fair-mindedly follows where evidence and reasons lead.
- Makes ethical judgments.

Level Five – Does most of the following:

- Accurately interprets evidence, statements, graphics, questions, etc.
- {Thinks through issues by} Identifying relevant arguments (reasons and claims) pro and con.
- Offers analysis and evaluation of obvious alternative points of view
- Generates alternative explanations of phenomena or events.
- Justifies (by using) some results or procedures, explains reasons.
- Fair-mindedly follows where evidence and reasons lead.

Level Four – Does most of the following:

- Describes events, people, and places with some supporting details from the source.
- Make connections to sources, either personal or analytic.
- Demonstrates a basic ability to analyze, interpret, and formulate inferences.
- States or briefly includes more than one perspective in discussing literature, experiences, and points of view of others.
- Takes some risks by occasionally questioning sources, or stating interpretations and predictions.
- Demonstrates little evidence of rethinking or refinement of one's own perspective.

Level Three – Does most or many of the following:

- Responds by retelling or graphically showing events or facts.
- Makes personal connections or identifies connections within or between sources in a limited way. Is beginning to use appropriate evidence to back ideas.
- Discusses literature, experiences, and points of view of others in terms of own experience.
- Responds to sources at factual or literal level.
- Includes little or no evidence of refinement of initial response or shift in dualistic thinking.
- Demonstrates difficulty with organization and thinking is uneven.

Level Two – Does most or many of the following:

- Misinterprets evidence, statistics, graphics, questions, etc.
- Fails to identify strong, relevant counter-arguments.
- Draws unwarranted or fallacious conclusions.
- Justifies few results or procedures, seldom explains reasons.

The summer portfolio review is the moment where the whole assessment process—University Studies goals, rubrics, and evidence of student learning—comes together.

Faculty members . . . repeatedly affirm that reading reflective essays from across the entire first-year program is a moving and illuminating experience.

- Regardless of the evidence or reasons, maintains or defends views based on self-interest and/or preconceptions.

Level One – Consistently does all or almost all of the following:

- Offers biased interpretations of evidence, statements, graphics, questions, information or the points of view of others.
- Fails to identify or hastily dismisses strong, relevant counter-arguments.
- Ignores or superficially evaluates obvious alternative points of view. Argues using fallacious or irrelevant reasons, and unwarranted claims.
- Does not justify results or procedures, nor explains reasons.
- Exhibits close-mindedness or hostility to reason.

The summer portfolio review is the moment where the whole assessment process—University Studies goals, rubrics, and evidence of student learning—comes together. A key part of the review is the *norming* or *calibration* process that begins each review day. In this process, reviewers practice scoring sample portfolios and recording those scores. The intention is to bring reviewers into agreement on what scores mean, in order to establish agreement about the levels of student work and where they fall along the rubric scales. The calibration exercise also develops an understanding of the University Studies goals that is critical to the validity of the review.

In this beginning session, we use portfolios that are particularly difficult to score. This practice brings the most challenging issues out on the table right away. The day's group reviews the "test" portfolios and writes their scores on a board or overhead for all to see. The facilitator begins the discussion by asking those who reported the most divergent scores to share their reasoning. Faculty members debate the strengths, weaknesses, and validity of the rubrics. These discussions help faculty members come to agreement around the goals of the program, what those goals really mean, and how they are evidenced in classroom work. Further, they provide a place where faculty can talk about what are acceptable, exemplary, and unacceptable levels of work for first-year students in relation to each goal. The discussions often verge deeply into issues of ethics and diversity. We always talk about how to build a core curriculum that meets university expectations while maintaining a comfortable level of faculty autonomy.

The actual portfolio review that follows is equally important. Through the review process, faculty members not only see work from classes and the quality of student work in Freshman Inquiry, but also the variety of assignments. It becomes clear that what faculty members ask in their assignments determines, to a large degree, the depth of intellectual endeavor and opportunity for growth and challenge that either lift the standard of student work or allow students to function at a level of moderate achievement. Faculty members become very excited by the new ideas and the student work they witness. They repeatedly affirm that reading reflective essays from across the entire first-year program is a moving and illuminating experience. Faculty members notice, over and over, that students' abilities to articulate their learning and talk about and exhibit their progress over the year is transformational. Seeing this kind of evidence of

student learning shows faculty the level of work that students can attain. In addition, faculty members comment that the wealth of creative assignments and connections that the work demonstrates is truly inspiring. These annual portfolio reviews consistently validate the design and goals of the program.

Using and Disseminating the Data

The Annual Assessment Report is a culminating, University Studies-wide assessment document, which is disseminated to faculty, the institution, and the public at large through our University website www.ous.pdx.edu. There are two dominant ways to look at the portfolio data. One is as information that helps improve teaching with regard to coverage of selected University Studies goals. The focus of the portfolio assessment is on student evidence, not on faculty teaching, but the portfolio review results suggest where a Freshman Inquiry teaching team might focus its teaching and course development energies. The Freshman Inquiry Faculty Coordinator provides each teaching team with a report that shares the mean portfolio scores on the rubrics, and asks the teams to review the data together (see Figure 5).

Figure 5
Assignment to Freshman Inquiry Teams to Capture How the Portfolio Data is Used for Program Improvement

ASSIGNMENT TO THE TEAMS
<p>During your team meetings during Fall Retreat and after, please review this document and any other assessment reports provided by the University Studies office. In your discussion, please consider the following questions:</p> <ul style="list-style-type: none"> • Do the portfolio data suggest that your team covers the four scored goals sufficiently? • Do data from the course evaluations suggest that your team addresses theme-specific learning objectives sufficiently? • Did your assignments allow students to document, in their portfolios, their work toward program goals? • Has everyone on your team used the mandated portfolio assignment appropriately? <p>Please use the report form on the next page to share the results of your discussion.</p> <p>If you wish, I will be glad to meet with your team or with a member of your team at another time, to review any questions about interpretation of the assessment data.</p> <p>This is an important part of the Freshman Inquiry assessment plan. Assessment without faculty review is a political exercise. Assessment that is thoughtfully reviewed by faculty can improve teaching and learning—in the case of the portfolio review, teaching and learning towards the University Studies goals. Please call or e-mail me if I can help you in your review process.</p>

The focus of the portfolio assessment is on student evidence, not on faculty teaching, but the portfolio review results suggest where a Freshman Inquiry teaching team might focus its teaching and course development energies.

Teams then fill out response forms (see Figure 6), which provide space to reflect on areas for improvement in their curriculum.

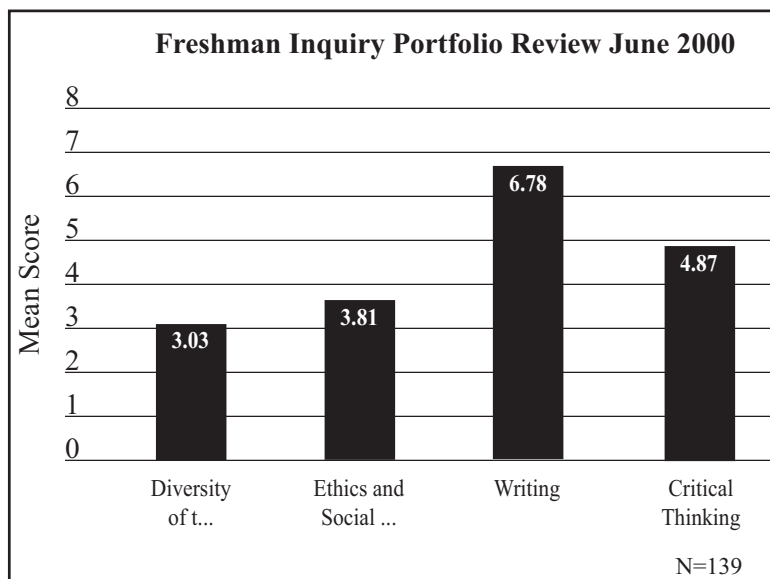
Figure 6
Freshman Inquiry Team Report Form

The reports call for the teams to meet, discuss the results, and record any plans for course improvement.

REPORT: FRESHMAN INQUIRY FALL TEAM ASSESSMENT MEETING(s)	
Name of Team:	Date(s) of Meeting:
<p>This report has a two-fold function: (1) to generate immediate feedback and discussion for Fall Retreat and (2) for further team analysis and reflection as faculty read through the analysis and experience the assessment sessions of the retreat. Please use additional sheets as needed. For this latter function, please return this report to Phil Jenks, Freshman Inquiry Coordinator (mail code UNST) by October 4, 2002. Use additional pages as needed. At your meetings, please review the portfolio review report, the end-of-year course evaluations, and any other pertinent assessment data. Here, please provide a summary of your discussion.</p> <p>What do these data tell you? Specify two observations related to the data for your team.</p> <p>What decisions has your team made with regard to changes in teaching practice, assignments, or curricular changes for your theme for this year?</p> <p>Aside from the Portfolio Review Report, what other assessment data were referred to during your discussions?</p> <p>How helpful to your discussion was the report on the portfolio review?</p>	

The reports call for the teams to meet, discuss the results, and record any plans for course improvement. The team then sends its reflection and plans back to the Freshman Inquiry Faculty Coordinator, thus closing the assessment loop. The reports provide evidence on how the Freshman Inquiry Program teaching teams are using assessment data to improve the teaching and learning, and are also giving the program administrators information about who might need resources support or follow-up. For example, the data from the portfolio review in 1999-2000 (Figure 7) showed low scores in diversity (The Diversity of Human Experience).

Figure 7.
Freshman Inquiry Portfolio Review for All Portfolios 1999-2000



When this data was given to the teams at the fall 2000 retreat, the faculty as a whole decided to focus their faculty development activities for the year on diversity. Each team looked at its diversity curriculum. Although low scores on a particular goal might be due to a failure to teach to that goal, a team may not have made assignments that could serve as evidence of teaching to that goal. Faculty members on each Freshman Inquiry team were asked to assess how their teaching and curricular practices support and document student progress towards the University Studies goals, and revise teaching and curriculum as needed to improve the courses for the following year. After the diversity efforts during the AY 2000-01, the portfolio scores for diversity rose from 3.03 in 1999-2000 to 4.33 in 2000-01. In 2001-02, when the focus moved to quantitative literacy, the diversity scores fell again. One team concluded:

The team feels that this low score is not necessarily indicative of the group of freshman we had last year; it may be a matter of failing to inform students of how their learning pointed toward this goal. Nevertheless, the new unit taught by _____ will include a considerable emphasis on ethics and social responsibility related to environmental and cultural issues in the American West . . . The new section relies heavily on a textbook that is about the “peopling” of the West, specifically cultural diversity and the history behind it. We have tried to make the point with our students that diversity should be viewed in broad terms—the total diversity of human experience, not strictly in terms of different ethnic groups. We believe that students understand this, and it will be reflected in their performance this year. These scores, too, will rise! In sum, the team is pleased with student

progress and learning in the more “traditional” academic skills—critical thinking, writing, and quantitative literacy. In the areas of Diversity and Ethics and Social Responsibility, we have taken the charge very seriously and will target certain assignments to that end. (Team Report, Fall 2002 Retreat)

On the same issue another team wrote:

*Over time, the data will show
us the direction for future
program revision, improvement,
and necessary changes in
assessment strategies.*

The low Diversity score for our team is somewhat puzzling because we normally devote time equal to an entire term to the study of the conflict between cultures. One way that we may be able to improve this score is to provide students with more time and opportunity to reflect on the curriculum at a personal level. This could include “free writes” and class time devoted to a broader discussion of how the motives behind these conflicts play out today in other areas of the world. We could also frame how they construct the portfolio essay on diversity to better reflect the course content. Additionally, we may sponsor the Native American Symposium again this year. (Team Report, Fall 2002 Retreat)

These portfolio assessment and feedback loops are successful to the degree that they result in reflection, curricular improvement, the refocusing of student learning objectives, and continued, more refined rubric development.

Secondly, the Annual Assessment Report enables the rest of the campus community to assess University Studies. The portfolio review represents our best measure of how well we are addressing our program’s student learning goals. The assessment data and the portfolio review give us information about student learning to systematically and continually work on program improvement based on authentic classroom evidence. Over time, the data will show us the direction for future program revision, improvement, and necessary changes in assessment strategies.

Next Steps and Final Reflections

While the portfolio review data has been very useful for the program, much work remains to complete the assessment plan for University Studies. Each year we agree on a set of initiatives relating to both improving and completing the plan. In the 2002-03 academic year, we brought all the rubrics into a 6-point scale and obtained agreement on those rubrics across the levels of the program. We also made progress on all undergraduates’ completing a four-year student electronic portfolio. Towards that end, we are working on assessing key assignments at the Sophomore Inquiry level and in focus groups of senior students, finding out more about the student experience in their course clusters, so that we can design a pilot assessment for the cluster course level. New data from the pre/post-surveys of students in Capstone courses will strengthen the assessment at that level. By the year 2008, we hope that every Portland State student will graduate with an electronic portfolio that can be used for graduate school or work applications. Moreover, we hope that our students will have learned the value of reflection: that they will continue to add to their portfolios, and take time to reflect on where they are going and what they are learning as they build their lives after graduation.

An important discovery in this work is that the *process* of assessment is as valuable as the data collected. Our discussions about methods and results continue to be valuable for creating a collective understanding of our program's goals for students. In doing this work, we are beginning to understand how complex the learning process is and how important it is for assessment to recognize this. Multiple measures are essential if we are to gain any understanding of the quality of learning. Most important, samples of student work provide the most authentic data a program can collect.

Each institution needs to develop an assessment effort using the methods and processes that are appropriate for its setting. A full assessment program takes time to build, but the "what" is not as important as the "begin." At Portland State, we have gotten as far as we have because of a major institutional commitment to a new general education program and because of the willingness of our faculty to engage in this learning endeavor. Although it was not always easy and there was some faculty resistance, faculty members now ask when the midterm assessment will be given and when they will get their data! They know that this information will help them understand their classes better and suggest ways for their students to reach their full potentials. Although the road is person-by-person at first, and we are still not entirely there, the end result is a community making decisions based on a culture of evidence, supporting student success in realistic ways, respecting the value and importance of every person, and engaged in and excited by the entire learning process itself.

Endnotes

1. SGID - Small Group Instructional Diagnosis. A midterm check-in used by faculty members or programs to give instructors information about their classes in time to make changes and answer questions.
2. College Classroom Environment Scales developed by Roger Winston at University of Georgia. Five scales measure student perception of the classroom environment, including cathectic learning climate, professorial concern, inimical ambiance, academic rigor, affiliation, and structure.

In doing this work, we are beginning to understand how complex the learning process is and how important it is for assessment to recognize this.

Multiple measures are essential if we are to gain any understanding of the quality of learning.