This chapter describes how a commitment to instructional design principles has prompted the evolution of collaborative interaction between student affairs professionals and academic faculty. Central to this collaboration are the opportunities that e-portfolios have made available.

e-Portfolios: A Collaboration Between Student Affairs and Faculty

Glenn Johnson, Jack R. Rayman

Collaboration between student affairs and faculty in higher education has evolved slowly over the years. In its more recent history, however, a significant call for more involvement is readily apparent. These more recent changes are easily chronicled through the emergence of key documents that advocate deeper levels of involvement by student affairs professionals in the teaching and learning mission of educational institutions. Initially published in 1937 and then revised in 1949, *The Student Personnel Point of View* (National Association of Student Personnel Administrators, 1937, 1949) provided an early foundation. It served to establish student affairs as an entity on campus and laid out the familiar service-oriented roles for this new unit: financial aid, career services, orientation, assessment, residential life, unions and student activities, and counseling services, among others. In doing so, it helped to define what has become a lasting notion of student affairs as a student service model, a characterization that has endured and for the most part served college and university campuses well. More recently, professional associations have advocated for models that build on this foundation of service and have progressively called on student affairs professionals for a higher level of responsibility in teaching and learning.

In 1996 *The Student Learning Imperative: Implications for Student Affairs* was published by the American College Personnel Association (1996). It contended that “the key to enhancing learning and personal development is not simply for faculty to teach more and better, but also to create conditions that motivate and inspire students to devote time and energy to educationally-purposeful activities, both in and outside the classroom” (p. 1). This report
called for student affairs “to form partnerships with students, faculty, academic administrators, and others to help all students attain high levels of learning and personal development” (p. 1) and marked an initial significant shift in thinking regarding the role of student affairs, from student service to active involvement and participation in teaching and learning.

Later the American Association for Higher Education, the American College Personnel Association, and the National Association of Student Personnel Administrators jointly published *Powerful Partnerships: A Shared Responsibility for Learning* (1998). This document echoed the earlier call for involvement such that “only when everyone on campus—particularly academic affairs and student affairs staff—shares the responsibility for student learning will we be able to make significant progress in improving it” (p. 1). The report goes on to identify principles of learning as they relate to college learning, making it evident that student affairs professionals have a role to play. The report defines learning as a social and constructive process: students should be encouraged to understand how they come to understand new concepts, and connect and make sense of their own learning.

More recently calls for action have become more explicit and directive. In 2002 the Association of American Colleges and Universities published a National Panel report, *Greater Expectations*, outlining the aims of a twenty-first-century liberal education. In this report, concerns were raised about the “fragmentation of the curriculum into a collection of independently owned courses” (p. 3). Stemming from this, recommendations were made that strongly argue for student affairs involvement in educational outcomes that result in students who are empowered, informed, and responsible. The report calls for higher education to “develop more sophisticated, nuanced ways of assessing student learning” (p. 6), build a culture of evidence, and share this responsibility for learning with all stakeholders.

Most recently, the National Association of Student Personnel Administrators and the American College Personnel Association published *Learning Reconsidered: A Campus-Wide Focus on the Student Experience* (2004). This document summarizes earlier efforts and reinforces the need for shared responsibility for teaching and learning; most important, it targets specific student learning outcomes. The report argues that collaboration is essential for their achievement to be realized: “No single arena of experience is solely responsible for producing these college outcomes” (p. 23). Assuming leadership roles to further this purpose in the areas of both teaching and assessment are natural conclusions that are reached and strongly advocated for student affairs professionals.

**Getting Beyond Current Perspectives and Boundaries**

This handful of key documents published by national organizations in student affairs demonstrates a concerted effort to effect a shift in the thinking about teaching and learning for student affairs professionals. The principles
they share and the argumentation used for why this change is needed are understood. Why, then, has the action to date been limited?

In a general sense, these documents address the context and motivation for change. They focus on the reasons that this action makes sense. But few of the documents speak directly about strategies for creating opportunities for becoming collaboratively involved in teaching and learning with our academic colleagues. For many, the reality of implementing these broad changes based on reasonable perspectives of cocurricular learning outcomes seems out of reach.

In what ways can student affairs begin the process of having influence on teaching and learning on today’s college campuses? Where do valued partnerships begin to form? How is collaboration fostered? How do you get to the point where jointly planned educational experiences begin to take place? Too often in the past, the experience of student affairs with initiating programs has demonstrated Sandeen’s fear that “… if academic affairs staff and faculty view them as disconnected from the ‘real’ academic program, they will most likely fail to improve undergraduates’ education experience” (2004, p. 31). Furthermore, in larger institutions where research and grant acquisition often take precedence, effecting real change in teaching and learning is even more challenging.

Student affairs staff need to be able to bring more to the table than insight on student learning outside the classroom. They need tools and expertise grounded in teaching and learning. If Sandeen’s prediction is correct that “in the decade ahead, student affairs staff should be expected to contribute significantly to broadened student learning experiences on their campuses” (p. 31), then student affairs professionals need to be familiar with the tools and strategies that are used to mediate teaching and learning within academic programs today. We will make the case that e-portfolio development is one of those key tools.

E-Portfolio Development

A separate but related shift in thinking about teaching and learning has also been in process: the move toward student demonstration of what is learned, that is, outcomes- or competency-based education. Coupled with this, networks and Web-based technologies have also evolved, making it much easier for students to create, store, and publish evidence of their academic work online. Combined, these demonstrations of learning through the use of online information technologies have made the implementation of student-centered electronic portfolio initiatives possible. These types of developments are now occurring on an international scale. To provide support for this rapid growth, the IMS Global Learning Consortium (n.d.) recently released an initial set of application specifications that aim to support interoperability between various e-portfolio systems as an attempt to help provide some structure for these applications.
More important to student affairs, however, e-portfolios are gaining in popularity due to the need for efficiency in conducting program evaluation and accreditation reviews. Aligning themselves with the outcomes-based perspectives of learning, accreditation agencies have mandated changes in their approaches to the accreditation process such that direct evidence of student learning must be central to program evaluation. Two of the larger accreditation agencies in higher education, the Accreditation Board for Engineering and Technology (ABET) and the National Council for Accreditation of Teacher Education (NCATE), have been moving steadily in this direction. For example, ABET (2005a) requires the examination of “representative samples of student work that reveal the spectrum of educational outcome” (p. 7). And of interest to student affairs professionals is that this spectrum of learning includes the outcomes of “understanding of professional and ethical responsibility,” “the broad education necessary to understand the impact of solutions in a global and societal context,” and “a recognition of the need for, and an ability to engage, in life-long learning” (2005b, p. 1). These cocurricular-oriented learning outcomes have not played a formal role within traditional engineering programs of study. In 2001 the NCATE instituted a “performance-based system of accreditation” that “requires compelling evidence of candidate performance for institutions to become accredited” (p. 1). Candidate performance requires meeting criteria related to diversity, professional practice, and appropriate disposition. Again, assessment criteria here are laden with cocurricular-oriented learning outcomes.

As a result of the increased capabilities of online technologies and the need to examine student evidence of learning, students are positioned as producers rather than consumers of knowledge, and performance- or outcome-based approaches to assessment and learning have become the expected norm in higher education. At the same time that student affairs is looking for opportunities to collaborate, colleges and universities are looking for help in implementing more developmental and less prescriptive approaches to teaching, learning, and advising.

**Investment in Instructional Design**

The Division of Student Affairs at Penn State University began its investment in instructional design as a foundational window into teaching and learning on campus by contributing to the hiring of a half-time position of project manager for the purpose of promoting and investigating e-portfolios in May 2002. This position was also partly funded by the university's Office of Information Technology Services; of interest to note, the position was housed in the John A. Dutton e-Education Institute within the College of Earth and Mineral Sciences. By itself, this collaborative investment demonstrates a seriousness of purpose, one in which student affairs shares a common perspective and commitment to the mission of the university. More practically, however, it also provided student affairs personnel with tangible involvement
related to the tools and strategies that are used to mediate teaching and learning within the context of academic programs on campus. Furthermore, this investment set in motion the use of a set of basic instructional design principles that has also helped to outline instructional strategies for involvement and collaboration: the analysis of learning needs and goals, the development of materials and activities, the evaluation of this activity, and the development of delivery systems to meet those needs. All of this led to opportunities that previously might have gone unnoticed or undervalued.

**Course Management Systems.** Tools such as course management systems and other information technology portals are a first level of opportunity that student affairs can begin to capitalize on. These systems provide access to scalable robust opportunities for online learning regardless of program or campus location. With these systems in mind and instructional design expertise on hand, the following questions became reasonable for the Division of Student Affairs to ask: How might these tools be used by student affairs to package and efficiently deliver many of the programs that it has to offer? To what degree do these programs require face-to-face interaction? Are opportunities to supplement what had previously been offered only locally now possible? How does student affairs get involved?

**Program Evaluation and Accreditation Processes.** A second level of opportunity became evident when student affairs engaged in conversations concerning program evaluation and the new requirements related to the accreditation process for the university. Cocurricular-oriented learning outcomes surfaced not only at the university level; further involvement found similar cocurricular-oriented outcomes associated with many academic program requirements, some of these influenced by shifts in new accreditation requirements. All of this engagement led to revealing opportunities for student affairs to become involved as academic programs were looking for ways to find meaningful cocurricular experiences related to these outcomes that they could efficiently incorporate into their programs of study. Student affairs can bring much to the table, but what role will it play? And how will this role be played out?

**E-Portfolios.** Far and away one of the most promising opportunities for collaboration between academic programs and student affairs is the electronic portfolio. One in three undergraduate students at Penn State’s largest campus are already involved in publishing academic information in their online Web space. A much smaller percentage have also already published information related to their cocurricular experiences (Johnson, 2005). Might student affairs provide better support for these students? What would this support involve? Could student affairs showcase these e-portfolios for other students to see? How many more students might publish information about involvement outside the classroom? How might this support serve to more intentionally promote higher expectations regarding cocurricular learning across the university?

As the Division of Student Affairs became involved in these various opportunities, it became imperative that a consistent and coherent voice that
promoted cocurricular learning come from student affairs. As a result, the Division of Student Affairs hired a second, full-time instructional designer and began work on the development of a common set of cocurricular learning outcomes (see the appendix to this chapter). At the same time that current program opportunities began to be accounted for, many began a reevaluation process, and all programming began to be mapped to this common set of learning outcomes.

Already the initial investment in instructional design is beginning to pay dividends not only in terms of motivating internal realignment but also in the development of strategies for securing external opportunities for collaboration related to e-portfolios university-wide. Student affairs professionals have become active members in a number of university-wide committees related to e-portfolio planning, e-portfolio requirements development, and the Coordinating Committee on University Assessment. The Division of Student Affairs was also recently selected as a cohort member of the National Coalition for Electronic Portfolio Research. The work of these committees, when completed, will serve to provide further evidence that will demonstrate student affairs’ seriousness of purpose, a purpose that clearly aligns itself with academic programs and shares a common commitment to the mission of the university. More significant dividends are hoped for, however, as a result of the promotion, activity, and support given e-portfolio implementation within academic program contexts. Here collaboration brings a fresh awareness and recognition of the importance of student engagement and cocurricular learning directly within the teaching and learning environment of the university.

**Developing an Academic e-Portfolio Culture**

The development of an e-portfolio system in cooperation with an academic unit is addressed in this section.

**Readiness Within the College of Earth and Mineral Sciences.** The College of Earth and Mineral Sciences (EMS) has a record of fostering a student-centered environment for teaching and learning. This goal has become an integral part of the mission of the college, and since its inception, its John A. Dutton e-Education Institute has taken a lead role in supporting faculty in creating this type of environment. This prominence also makes this instructional design unit an ideal location to house an instructional designer funded in part by the Division of Student Affairs. Administration and faculty support for student-centered approaches within the college are obvious. For example, Robert Crane, associate dean for undergraduate education, commented, “There should be more to a degree program than just a series of courses completed. We have to find ways to help students find the deeper meaning that is embedded throughout the range of possible experiences in the college” (R. Crane, personal communication, April 10, 2006). Semih Eser, associate professor of energy and geoenvironmental engineering, is featured on the college’s Web site as he
documents the reconsideration of his teaching style in a video montage enti-
tled, “From Bubble Sheets to Online Portfolios” (Penn State University, Col-
lege of Earth and Mineral Sciences, 2006), switching his course teaching style
to an active-learning, project-oriented approach. In addition, undergraduate
students in the College of Earth and Mineral Sciences have been active in
using their Web space to publish what they have learned as part of their Penn
State experience. According to the Web use surveys conducted by the John
A. Dutton e-Education Institute since 2001, consistently over half of the EMS
undergraduates have activated their Web accounts and have used this Web
space to publish academic-related work (Johnson, 2005).

**First Year Seminar Experience.** Similar to many other college pro-
grams throughout the United States, EMS requires that all incoming stu-
dents enroll in a first-year seminar for the purposes of connecting with
college-level learning in a small class, interacting with a senior faculty mem-
ber in the college, and being introduced to the range of university-wide ser-
VICES and opportunities that are available. Recently e-portfolios have become
part of this experience. At a minimal level of involvement, each student
posts a simple introductory Web page with a link to a résumé. In doing so,
each student has been introduced not only to the concept of an e-portfolio
(thinking about their education in terms of the evidence they are collecting
instead of concentrating purely on doing what it takes to receive a passing
grade) but also to the information technology infrastructure, a support
mechanism they will come to heavily rely on.

**Building a Professional e-Portfolio.** The First Year Seminar involve-
ment in e-portfolios led to the creation of a new course designed to follow
up on this basic experience: EMSC 300, Building a Professional e-Portfolio.
This is a one-credit course that can be taken more than once by students in
the college. The course requires the inclusion of a broad range of academic
and cocurricular evidence and reflective narrative that targets career goals,
and it focuses attention on Penn State Career Services’ “Seven Career and
Essential Life Skills” (Penn State University Career Services, 2006) in the
publication of an e-portfolio. Feedback becomes an essential part of the
e-portfolio development process, beginning with peers evaluating each
other’s e-portfolios and next incorporating faculty and adviser feedback;
finally connections are made with alumni mentors for a real-world evalua-
tion and feedback of the student’s e-portfolio. This final step has proven to
be enlightening as well as motivating, as this places students in a position
where they are using their e-portfolio to begin to network within their cho-
sen professional community. Clearly the type of thinking the e-portfolio tool
engenders—thinking about their education in terms of the evidence they
can share instead of concentrating purely on doing what it takes to receive
a passing grade—is required in this preprofessional context.

**Evidence Guidelines for Undergraduate e-Portfolios.** As more mete-
orology students enrolled in this course, became more involved in using
e-portfolios, and involved more faculty in this process, the question of how
to support these students became the next logical challenge. How does a student come to know what should be included in an e-portfolio? What evidence is important? What is it that really matters? An instructional design response to this challenge generates an intriguing question for the faculty in this program: What would faculty see in an exemplary e-portfolio in this program? What would an exemplary student link to? After one year, what would the faculty see? After two years? On completion of the program? Developing evidence guidelines forces faculty to focus not on courses completed but instead on learning outcomes that target evidence and experience. This is a fresh perspective for many faculty to take with regard to their teaching and to ensure that these opportunities exist within a program (Penn State University, Department of Meteorology, 2006).

This instructional design approach fosters a fresh examination of teaching and learning. In a sense, the e-portfolio is being used as a means to prompt faculty to articulate exit outcomes for their program. The accreditation process has changed such that the focus is now on evidence of student learning. Here, this process of identifying evidence and experiences is the same and inspires discussion that accreditation authorities would like to see take place in programs, especially those that rigidly focus on course offerings. What results is a conversation that involves preparing the whole student: a student who can learn, think critically, make decisions, and solve problems in a real-world context. This inextricably brings with it the discussion of a range of attributes, such as professionalism, ethics, interpersonal skills, and self-sufficiency. Now that there is an e-portfolio culture, there is a legitimate place for these cocurricular learning outcomes to come into the conversation within this academic program. Previously it was often difficult to identify where opportunities existed within course offerings that targeted this type of engagement. In many cases, perhaps we assumed that students would gather these attributes on their own.

Students benefit from this process as well. Rather than reinforcing the “maze savviness” in students (that is, their ability to find the easy way through the mass of requirements), this process now puts students in a position that requires them to provide evidenced-based argumentation that they can use to differentiate themselves from someone who has simply taken the courses versus someone who, in the case of meteorology, can forecast the weather. Students are challenged to articulate this differentiation in terms of what they know, what they can do, and what they value as important instead of just referencing their grade point average.

**Readiness Within the College of Arts and Architecture.** Student teaching programs work to develop university students through a range of classroom and real-world experiences into novice teachers who are reflective practitioners. These students must learn to interact, think on their feet, and make instructional decisions based on a foundation of understandings and experience that they have been involved in as part of their program.
of study. The challenge for teacher educators is to assist their student teachers to make connections across their program of study.

Art and music students are familiar with the portfolio concept. Individual courses involve students in performance-related activities, either individually, with peers, or with children in schools. To support reflective thinking, the use of journaling to evaluate these experiences is often employed. Therefore, folding journaling activities into a portfolio context that contains performance-related evidence is not a large step to take. The electronic aspect of the portfolio may seem to be a larger step for these non-technical programs, but with support, the technology lends efficiencies for the manipulation and sharing of these materials.

**First Year Seminar Experience.** The First Year Seminar experience becomes a key entry point for the introduction of e-portfolio thinking and the technologies that make it happen. All students in the College of Arts and Architecture are involved in creating electronic portfolios during this first-year experience. In music education, students create a simple Web site that chronicles “Life as a College Student” and “Life as a Music Major.” Students within this music education community share their involvement with each other through e-portfolios and recognize opportunities that otherwise they might not have become involved in. Besides teaching the basic technology skills, this activity has become a low-stakes and fun way to introduce themselves to each other as well as become more aware of opportunities in the music education community and the university as a whole.

**Building Professional e-Portfolios.** Rather than develop a new course to support the putting together of a professional e-portfolio, the music education program, as part of the process of remapping their curriculum, decided to include the e-portfolio as a central piece of the program. This program has positioned the e-portfolio such that it “can serve as an organizer, a goal setter, and a descriptor. It helps them collect evidence of their teaching skills, musicianship, technology skills, relationships with students in the schools in which they practice teach, assessment abilities, professional development, and curriculum planning” (Penn State University, Music Education Program, 2006). As a result, goals were established for each year of the program so that students could develop, build on, and demonstrate attainment of these goals from what they had learned in the courses they took, as well as what they had learned from their experiences outside the classroom. Most important, this process focused not on courses but instead on experience, evidence, and reflection. What resulted is a framework that students can use to help make the connections across what they have learned in their courses as well as with what they have experienced in the real world. The e-portfolio now provides program faculty with a window to review and provide feedback on a student’s complete developmental process: “The e-portfolio provides a structure for preservice teachers to reflect regularly on their
strengths and weakness as they select evidence for their portfolio. It enables them to authentically assess their own progress” (Penn State University, Music Education Program, 2006).

**Evidence Guidelines for Undergraduate e-Portfolios.** The music education program lists four goals for the e-portfolios of final-year students:

- To provide students with an opportunity to collect, select and reflect upon what they have learned at Penn State.
- To provide students with an opportunity to display evidence of their teaching skills in various musical settings.
- To provide students with a means of marketing themselves as music educators with prospective employers.
- To provide students with a strategy of continuing their own reflective professional development after graduation [Penn State University, Music Education Program, 2006].

Employing a different strategy, the art education program provides students with a teaching-learning portfolio tapestry framework (Penn State University, Art Education Program, 2006). This framework is a matrix that students use to collect and connect evidence of their learning throughout their program of study. This matrix is bordered on the horizontal axis above by the five elements of the Penn State Teacher Preparation Model:

- Educators are lifelong learners.
- Educators understand how students develop and learn.
- Educators possess discipline knowledge and pedagogical understanding.
- Educators manage and monitor learning and development.
- Educators are members of learning communities.

And this is juxtaposed on the vertical axis of the matrix with the conceptual threads that run through the art education program—areas such as instructional methods, technology, and assessment but also diversity, identity, and collaboration (Penn State University, Art Education Program, 2006).

The exit outcomes from both of these programs represent a culmination of the learning that takes place throughout each program of study. (It would be unrealistic to assume that students would be able to achieve all of these in a single capstone experience, although in the past, this has sometimes been the case.) Furthermore, the outcomes also represent a healthy dose of engagement and involvement outside the classroom throughout the college experience, an attention to career planning and professional development after college, and the development of skills over time that will support the persistence of each of these attributes—all items of great interest to student affairs. A student’s e-portfolio becomes the representation of this effort—the evolution of his or her professional identity.
Creating Opportunities for Collaboration

Student-centered programs assist graduate students who have developed strategies for learning beyond their college preparation. In order to do this, they not only must make connections between what they have learned in the courses they take but also make connections between what they have experienced at university and what takes place in the real world. From a program-level perspective, e-portfolios can be strategically used as a mechanism to support the development of these types of learners: preprofessionals who have developed a sense of strategic awareness and have adopted a nature that is critically curious. Isn’t this what characterizes lifelong learners?

As discussion of and activity related to e-portfolios continue to evolve, opportunities for collaboration avail themselves because academic programs require effective methods for supporting the integration of the understandings, skills, and attributes that are gained as a result of student engagement and involvement both inside and outside the classroom. As discussion and activity related to satisfying accreditation and program evaluation needs begin to evolve, this too leads to opportunities for collaboration where student affairs experience and expertise can influence curricular decision making and programming. As a result of the development of an e-portfolio culture in these programs, there are now rich opportunities to become involved in a conversation where cocurricular learning outcomes are an inextricable and explicit part of the academic program. Having helped to develop, support, and legitimize this culture, student affairs may become a legitimate partner in these discussions. E-portfolios and instructional design have helped to make this seat at the table more viable.

Future plans include a collaboration with academic programs to lead an investigation examining the administrative efficiencies that might be obtained if e-portfolios were more directly connected to the accreditation requirements of Accreditation Board for Engineering and Technology and National Council for Accreditation of Teacher Education programs. In addition, student affairs is taking a leadership role in evaluating the impact that e-portfolio systems have on the level of awareness, expectation, and engagement in cocurricular learning outcomes in general.

The process of change is slow, but evidence of the profit from initial investments is slowly being seen. E-portfolios are now referenced in the strategic plan of the university. Many more programs encourage student involvement in the development of e-portfolios, and numerous programs now require it. New audiences beyond that of undergraduate populations are also becoming involved. The use of e-portfolios by graduate students is being encouraged and supported. In addition, e-portfolios have become an instrumental learning tool for several professional certificate distance education programs, and through collaboration, their use seems destined to become pervasive throughout higher education.
Appendix: Cocurricular Learning Outcomes, Division of Student Affairs, Pennsylvania State University

Knowledge Acquisition/Application
Students will:
• Develop an understanding of knowledge from a range of disciplines/areas
• Demonstrate the ability to integrate and apply ideas and themes across the curriculum and cocurriculum

Cognitive Competency
Students will:
• Acquire learning skills to assist in their academic success
• Develop critical and reflective thinking abilities
• Apply effective reasoning skills

Life Skills and Self-Knowledge
Students will:
• Determine their career interests
• Acquire career management skills
• Develop the ability to manage and resolve interpersonal conflicts
• Cultivate a propensity for lifelong learning
• Develop personal health, fitness, wellness and leisure habits and identify health risks
• Improve self-understanding and awareness by developing an integrated personal identity (including sex, gender, sexual orientation, race, ethnicity, culture and spiritual)
• Exhibit responsible decision-making and personal accountability

Personal Integrity and Values
Students will:
• Acquire ethical reasoning skills
• Improve their ability to manage their emotions effectively
• Develop a sense of personal integrity and clarify their personal values
• Appreciate creative expression and aesthetics
• Demonstrate compassion and empathy for others

Intercultural Development
Students will:
• Possess multicultural awareness and knowledge
• Develop sensitivity to and appreciation of human differences
• Exhibit the ability to work effectively with those different from themselves
• Demonstrate a commitment to social justice

Leadership and Active Citizenship
Students will:
• Communicate effectively with others both verbally and in writing
• Demonstrate an understanding of group dynamics and effective teamwork
• Understand leadership theory and styles
• Identify their own leadership style when working with others
• Develop a range of leadership skills and abilities such as effectively leading change, resolving conflict, and motivating others
• Assume a sense of civic responsibility and a commitment to public life

References


**GLENN JOHNSON** is project manager of Penn State’s e-Portfolio Initiative.

**JACK R. RAYMAN** is director of career development and placement services and affiliate professor of counseling psychology and education at Pennsylvania State University, University Park.