

## Faculty Professional Development: Advancing Integrative Social Pedagogy Using ePortfolio

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This article highlights the work of three faculty members across two different professional development seminars at LaGuardia Community College. It illustrates how their work was guided and is linked together by a common thread—the use of ePortfolio to foster integrative social pedagogy—as a result of their participation in these seminars. This connection highlights the interdependent relationship that exists between faculty members’ professional development and students’ learning in the classroom. The nature of the professional development seminars discussed in this article—Art of Advising: Learning and Implementing Holistic Advisement Skills and Connected Learning: ePortfolio and Integrative Pedagogy—rests firmly on the integrative social teaching and learning experience that faculty members strive to provide for students. In this article, two faculty members discuss how they were able to localize and integrate ideas explored in the Art of Advising: Learning and Implementing Holistic Advisement Skills seminar in two Principles of Accounting I courses to foster advisement as integrative social pedagogy. Another faculty member describes incorporating the ideas examined in the Connected Learning: ePortfolio and Integrative Pedagogy seminar in a General Chemistry I course section to facilitate reflection as integrative social pedagogy. The activities and classroom practices used to facilitate interaction, engagement, and learning among the students in the courses are described. Through analysis of student surveys and reflective writings, the results of the implementation of these practices are also discussed.

Randy Bass and Heidi Elmendorf defined *social pedagogies* as

design approaches for teaching and learning that engage students with what we might call an “authentic audience” (other than the teacher), where the *representation of knowledge* for an audience is absolutely central to the *construction of knowledge* in a course. (Bass & Elmendorf, n.d., para. 2)

This definition echoes the theories posited by Dewey (1963) and Vygotsky (1978) regarding the social nature of human learning. Vygotsky (1978) contended that “human learning presupposes a specific social nature and a process by which children grow into the intellectual life of those around them” (p. 88), while Dewey (1963) argued that when the classroom operates as a social group, learning becomes a process of exchange in which all have a share.

At LaGuardia Community College (LaGuardia), an explicit educational goal is the development of the whole student who can integrate the knowledge and skills gained in each course into a coherent whole and develop a strong connection to peers, faculty, and the community. ePortfolio is seen as a core tool for promoting this development and the conversation around the use of ePortfolio as a tool to advance the practice of integrative social pedagogy points back to professional development. Fostering teaching and learning excellence that prompts and strengthens dialogue, connections, and inquiry among students is best realized when faculty participate in professional

development activities that promote these types of practices. Most professional development activities offered by LaGuardia’s Center for Teaching and Learning are one year in length; the first semester is usually marked by guided experimentation and reflection, while the second semester lends itself to implementation.

This article highlights how the work of three faculty members across two different professional development seminars was guided and linked together by a common thread—using ePortfolio to foster integrative social pedagogy—as a result of their participation in these seminars. This connection highlights the interdependent relationship that exists between faculty’s professional development and students’ learning in the classroom. The nature of the professional development seminars discussed in this article—Art of Advising: Learning and Implementing Holistic Advisement Skills (Art of Advising) and Connected Learning: ePortfolio and Integrative Pedagogy (Connected Learning)—rests firmly on the integrative social teaching and learning experience faculty members strive to provide for students. The richness that emerges from experimenting, reflecting, and implementing integrative social pedagogical practices using ePortfolio results in a greater attention to student connections—with peers, between and across courses, across disciplines, with audiences other than the faculty, inside and outside of the classroom—made visible by using ePortfolio. These activities reinforce the concepts of integrated learning and the necessity of helping students to connect their learning to their previous experiences both inside and outside of the

classroom, across the curriculum, and to their future studies. A related and equally important benefit is the improvement in the connection to peers that students experience; this has been identified as a key factor in student retention and satisfaction (Endo & Harpel, 1982; Tinto, 1997).

The challenge then facing faculty is how to localize these ideas to shape their own teaching and learning practices in order to advance integrative social pedagogy using ePortfolio. Thinking about a particular course, a program, a discipline, and a group of students, how can faculty bring these concepts home?

### **Professional Development Seminars**

#### **Art of Advising: Learning and Implementing Holistic Advisement Skills**

At LaGuardia, Art of Advising is a newly formed professional development seminar that is currently in the experimental stage. The integrative nature of this seminar allows faculty and staff to work together in order to go beyond the common perception of advising as course selection, and examines factors critical to how the Council on the Advancement of Standards in Higher Education (2013) defined advising as assisting “students in the development of meaningful educational plans” (p. 4).

Working with largely first-generation college students, faculty and staff participating in this seminar seek to explore the following:

- How do we guide students’ educational growth and change?
- How can we help students envision and build new identities as learners and emerging professionals?
- How can ePortfolio be employed as an advising and pedagogical tool to encourage student discussion and the linking of academic, transfer, and career issues in their disciplines?

In addition to the above-noted questions, the seminar aims to explore, adapt, and demonstrate ePortfolio practices to help students identify and reflect on their interests, skills, strengths, and challenges and to facilitate their transfer between courses, between semesters, and from LaGuardia to a senior college and to career opportunities. So this begs the question, how can faculty integrate these ideas into their daily classroom practices in order to facilitate interaction, engagement, and learning between students?

Two accounting faculty members, one a seminar participant and the other a seminar leader, chose to collaborate to find an innovative way in which to

address this challenge by approaching advisement as a community affair. So, picture these two faculty and 70 students using ePortfolio to build, connect, and sustain advisement efforts within, across, and outside two Principles of Accounting I courses. After all, “ideally, social pedagogies strive to build a sense of intellectual community within the classroom and frequently connect students to communities outside the classroom” (Bass & Elmendorf, n.d., para. 2).

#### **Connected Learning: ePortfolio and Integrative Pedagogy**

At LaGuardia, Connected Learning serves as one of the foundational professional development seminars for faculty who want to integrate the use of ePortfolio into their classroom practices. Faculty participating in the seminar use the Fall semester as a time for learning and exploration, as well as classroom experimentation, through the use of assignments created during the seminar. The Spring semester serves as a time for piloting, in a targeted course, assignments that have been reworked based on feedback from colleagues and seminar leaders. Throughout the year, seminar participants and leaders from across all disciplines share and learn from each other’s work, as well as from student work, and explore useful ways to incorporate ePortfolio into the classroom authentically, rather than as an appendage to the syllabus. Moreover, participants are required to build and use an ePortfolio over the length of the seminar, thereby allowing them to not only become familiar with ePortfolio, but also have all their work archived for future reference.

Specific goals for the seminar include:

- introducing faculty who are new to ePortfolio to its technology and pedagogy;
- drawing upon the expertise of veteran ePortfolio practitioners to support new faculty learning, while at the same time challenging experienced faculty to deepen their practice;
- considering new and proven approaches to fostering integrative learning, student interaction, and connection through ePortfolio;
- maximizing ePortfolio’s potential as a teaching and learning tool; and,
- creating/critiquing course syllabi, assignments, and projects to support integrative pedagogy.

The goal of the Connected Learning professional development seminar is thus to introduce faculty to ePortfolio as not only a technology, but more importantly, a tool to foster integrative pedagogy. ePortfolio stresses the necessity of helping students to connect their learning to their previous experiences both inside and outside of the classroom, across the

curriculum and academic disciplines, and to peers, faculty, and external audiences (Eynon, 2009).

One faculty participant who taught chemistry selected the General Chemistry I course as a vehicle through which to integrate ePortfolio in a way that was thoughtfully designed to facilitate reflection as a means to foster integrative social pedagogy. The faculty member incorporated various activities in the course that prompted students to:

- reflect on their own lives (past, present, and future), and on others' lives;
- reflect on group and peer mentoring activities; and
- reflect as a tool for their professional development.

### Elements Critical to the Application of Integrative Social Pedagogy

As participants in the Art of Advising and Connected Learning professional development seminars, faculty explored *inquiry*, *reflection*, and *integration* as key ingredients for using ePortfolio to promote integrative social pedagogical practices.

- **Inquiry:** Students explore key questions that allow them to think about the future self: Who am I? Who do I want to be? Why do I want to be that person? What would it take for me to be that person? What knowledge and skills do I need?
- **Reflection:** Students share, learn, and build a supportive structure and community for exploring academic and career success: "Reflection needs to happen in community, in interaction with others" (Rodgers, 2002, p. 845).
- **Integration:** Students think about the path to academic and career success in terms of its totality, thereby "transferring learning to new, complex situations within and beyond the campus" (Association of American Colleges and Universities, 2009). Students gain an understanding of how the course, the major, the discipline, and the career path fit together.

In this article, the faculty's thinking about inquiry, reflection, and integration in the design of ePortfolio activities to foster integrative social pedagogy centers on contextualized learning. Dewey (1915) pointed to contextualized learning as a means for students to apply experiences garnered in their daily lives to their classroom learning, while constructing knowledge that can be applied to new situations.

### The Role of ePortfolio

Writing in the *Handbook of Research on ePortfolios*, Tosh, Werdmuller, Chen, Light, and Haywood (2006) promoted what is described as a "Learning Landscape": a framework for thinking about student learning that includes the technology and media that are part of the students' daily lives, the contributions of co-curricular and social activities to learning, and the value of social interaction to learning and personal development. ePortfolio is very well suited for providing this learning landscape because it furnishes familiar technology and media, a means of community building, a venue for mentoring, and an intellectual space for self-exploration of one's academic and professional development. Furthermore, ePortfolio's ability to act as a central repository for student work allows students the opportunity to integrate, reflect upon, apply, and share what they have learned: "ePortfolios can demonstrate what students have learned because, at their best, ePortfolios make visible the production of knowledge" (Johnsen, 2012). In the execution of the Principles of Accounting I and General Chemistry I initiatives, faculty examined the benefits of using ePortfolio versus a learning management system (LMS). Faculty concluded that unlike an LMS, which is course-based, ePortfolio facilitates students' ongoing access to their learning, which remains visible after they have left the course and even after they have left LaGuardia. Looking back at the ePortfolios and their contents provides support for students because elements of the afore-mentioned initiatives become especially applicable when students prepare to transfer and/or enter the workforce. Furthermore, an LMS does not provide the ability to cut across courses in the way that an ePortfolio does; this was a feature that was crucial to the Principles of Accounting I initiative, in which ePortfolio allowed two separate classes to connect and converse in one space. Finally, an LMS is faculty-driven, with ownership residing predominantly with faculty; therefore, faculty did not consider the use of an LMS to be appropriate, as the aim was for students to have autonomy and a sense of ownership and authorship during the initiatives. The use of ePortfolio, which is student-driven, facilitated this student-centered approach.

### Classroom Practices: Localizing the Ideas

Keeping all of these critical elements in mind, the three faculty members were able to identify key questions relating to the implementation of integrative social pedagogy, such as: How can advisement for personal and professional growth be social? How can reflection be used to build community? What role does the authentic audience play? What role does the faculty

play? How can the integrative nature of ePortfolio help to facilitate community building? These questions formed the basis of the assignments and activities developed in the Principles of Accounting I and General Chemistry I initiatives.

### Advisement as Integrative Social Pedagogy: Principles of Accounting I Advisement Initiative

The Principles of Accounting I advisement initiative centered around the concept of career-readiness, which is ingrained in the discipline, and it was unique, not only because the learning was connected across two classrooms, but also because the group of students was composed predominantly of individuals who had just entered college and would not generally be exposed to assignments focusing on careers until a later time in their college journey. The faculty recognized that having students explore career readiness within the context of the accounting profession lends itself to short- and long-term goal setting, which helps students to define and/or refine their academic and career plans for success.

The Principles of Accounting I advisement initiative was structured as six assignments and two workshops, which students completed over the course of a semester. Each Principles of Accounting I class was divided into two groups, Group 1 and Group 2. The members of each group were then paired across classes. This structure facilitated a student-centric approach, in which faculty created and communicated assignments but for the most part remained in the background, with dialogue and peer mentoring occurring across and within the classrooms through the use of ePortfolio. The assignments, which were staged, were set in the context of a student preparing for a career in business, with an emphasis on accounting. To provide students with a realistic experience, faculty incorporated a real-world company, Steinway & Sons, into the initiative. Details of the assignments and the workshops are included in Appendix A, and a description follows. See Figure 1 for a screenshot of what students saw when they logged into the Principles of Accounting I advisement initiative ePortfolio.

**Assignments and workshops.** Drawing on one of the fundamental questions explored in the Art of

Figure 1  
*Principles of Accounting I Advisement Initiative ePortfolio—Welcome Page*

The screenshot shows the welcome page of an ePortfolio. At the top left, there is a graphic of a grand piano. To its right, the text reads: "Accounting Business Internship Advisement Career Senior College Certified Public Accountant ePortfolio @ LaGuardia Community College". To the right of this graphic is a large red "Welcome!" text. Below this is a navigation bar with links: "Welcome", "Assignments", "Participant Workspaces", and "Course Information". The main content area has a "Welcome" heading and a "Dear Accountants:" section. The text under "Dear Accountants:" reads: "Welcome! BTA 111: Principles of Accounting I is the introductory course for the Accounting Program. This course reviews the fundamental concepts and techniques of recording transactions in journals, summarizing the transactions, using adjusting and closing procedures, and preparing financial statements and reports. You will be introduced to, amongst other topics, valuation accounting relating to inventory and fixed assets, internal control concepts with an emphasis on cash control, procedures for notes payable and receivable, and payroll accounting. As part of this course, you will be expected to participate in a term research project, which will allow you to think about and plan for a career in accounting. The Company that will be at the focus of much of the research and analysis you will perform as it relates this project is Steinway & Sons - an entity that has had, and continues to have a lasting impact on the immigration, business, cultural, urban, and labor history of Queens and New York City. From its modest beginning in 1853, Steinway & Sons is currently a wholly owned subsidiary of Steinway Musical Instruments, Inc., a publicly held entity, whose stock is traded on the New York Stock Exchange ("NYSE") under the "LVB" symbol. Activities to be completed for the term research project can be found on the **Assignments** tab of this ePortfolio."

Advising professional development seminar, as it relates to guiding students' educational growth and change, the Principles of Accounting I course assignments started with goal exploration and community building and then moved on to company research, resume building, and interview preparation. The assignments were coupled with two workshops led by professors who specialize, respectively, in resume and interview preparation. The objective of Assignment 1 was for students to provide a brief description of themselves and then explore their short- and long-term goals, while also learning how to use ePortfolio. This was followed by Assignment 2, which had each student review their partners' responses to the first assignment. The second assignment was developed to foster a sense of community among students and to allow students the opportunity to engage in peer mentoring in a non-threatening way. In response to Assignment 1 and Assignment 2, the following represents excerpts of a conversation that happened between Student # 1 and Student # 2 that highlights the level of self-exploration, engagement, support, and community these assignments sought to build.

Student # 1's About Me:

Growing up, I was always the shy one who never really spoke to anyone. Speaking out loud, was just not my thing. If you get to know me though, that'll all change. Even with this quality, I don't allow anyone to take advantage of me. Public speaking—speaking out loud, that's my weakness . . . it's what I need to work on! There are some qualities about me that make me who I am today. Hard worker, confident, strong, courageous, determined and shy, of course. I could be the sweetest person, but just know that if you treat me a certain way, even with my shyness, I most probably won't stand for it.

I have a way with numbers! I mainly enjoy problem solving though. That's my thing! A major in Mathematics is something I've always considered—probably become a math teacher in the near future—who knows. Presently though, accounting is what I'm majoring in—its okay so far—can't complain. Who knows though, maybe I might change my mind!

Goals need to be set in order to become successful. My long term goal is to try to get to a 4.0 GPA while I'm in college. This can be achieved simply because I am hard-working and determined. My attitude towards college and my education will allow me to achieve great heights.

Later, Student # 1 wrote: "My short term goal includes paying attention in class, completing given

assignments on time, actively participating and doing homework daily are going to be my main priorities in achieving this goal."

Student # 2's Response:

I really enjoyed reading your profile. I've always respected folks who "come to terms" with what they would like to work on (in this case, your being timid). I always [have] been one to believe that if you have the drive to achieve something, your "weak spots" will become irrelevant—even to the point of them no longer being an issue or a setback. I believe your passion for math is something that will bring you out of your comfort zone, perhaps leading to tutoring others & (like you mentioned) even teaching. I also like how committed you are. In the midst of all the "college daze" and hoopla, you seem to be focused, driven and ready for whatever is about to come in your direction—whether it may be a difficult exam or even doing a math problem on the board and explaining to the class (!) how you came to your answer. That's incredibly admirable, and I applaud you for that. I hope nothing but the absolute best for you, [Student # 1]. Continue to stay focused and inspire others to do the same.

See Figure 2 for ePortfolio screenshots of Student # 1's full About Me and Student # 2's response.

We may all, at some time, have encountered a student or acquaintance preparing for an interview who asked us about potential interview questions and responses. To that end, Assignment 3 pointed to faculty work in the Art of Advising professional development seminar, which required faculty to explore, adapt, and demonstrate ePortfolio practices to help students identify and reflect on interests, skills, strengths, and challenges. Assignment 3 was structured to have students engage in dialogue across and within classrooms by researching and developing interview questions and drafting responses to those questions. Each student in Group 1 was required to develop two interview questions, while each student in Group 2 was required to answer any two interview questions. This assignment thus gave students insight into some of the typical questions that they might be asked during an interview, and it allowed them to gauge their ability, and that of their peers, to respond to the questions. The following represents a sample of interview questions and responses researched and developed by students in response to this assignment. In response to Question 1, "What are your strengths and weaknesses?", one sample response was:

My strength is my flexibility to handle change. As customer service manager at my last job, I was able



Figure 2

*Principles of Accounting I Advisement Initiative ePortfolio—Student Work*

### Student # 1's About Me

\*\*\* is the name. I was born on October 13, 1994--17 years old. (Libra) from Brooklyn, New York. Growing up, I was always the shy one who never really spoke to anyone. Speaking outloud, was just not my thing. If you get to know me though, that'll all change. Even with this quality, I don't allow anyone to take advantage of me. Public speaking--speaking outloud, thats my weakness...its what I need to work on! There are some qualities about me that make me who I am today. Hardworker, confident, strong, courageous, determined and shy, of course. I could be the sweetest person, but just know that if you treat me a certain way, even with my shyness, I most probably won't stand for it.

In my spare time, I mainly enjoy hanging out with friends, going to the movies and shopping. Unlike most girls, I love sneakers!--once lined up at 4:00a.m. until probably about 10:00a.m. waiting for the release of one. Some people would never do it and probably consider it pointless; but thats just me....if theres something i like Ill most likely do whatever it takes to get to it!

Math has always been my passion from a young age. Throughout my educational career, I have taken several math courses. This includes Algebra, Geometry, Trig, Pre-Calc and is presently taking Statistics. I have a way with numbers! I mainly enjoy problem solving though. That's my thing! A major in Mathematics is something I've always considered--probably become a math teacher in the near future--who knows. Presently though, accounting is what I'm majoring in--its okay so far--can't complain. Who knows though, maybe I might change my mind!

Goals need to be set in order to become successful. *My long term goal* is to try to get to a 4.0 G.P.A. while I'm in college. This can be achieved simply because I am hard-working and determined. My attitude towards college and my education will allow me to achieve great heights. Not only that, but I need to work extremely hard in all of my courses--always willing to put in time and effort into any given or extra work.

*My short term goal* includes paying attention in class, completing given assignments on time, actively participating and doing homework daily are going to be my main priorities in achieving this goal.

### Getting to Know Your Colleagues

#### Student # 2's Response

I really enjoyed reading your profile. I've always respected folks who "come to terms" with what they would like to work on (in this case, your being timid). I always been one to believe that if you have the drive to acheive something, your "weak spots" will become irrelevant-even to the point of them no longer being an issue or a setback. I believe your passion for math is something that will bring you out of your comfort zone, perhaps leading to tutoring others & (like you mentioned) even teaching. I also like how committed you are. In the midst of all the "college daze" & hoopla, you seem to be focused, driven & ready for whatever is about to come in your direction-whether it may be a difficult exam or even doing a math problem on the board & explaining to the class (!) how you came to your answer. That's incredibly admirable, & I applaud you for that. I hope nothing but the absolute best for you, \*\*\*. Continue to stay focused & inspire others to do the same.

to turn around a negative working environment and develop a very supportive team. As far as weaknesses, I feel that my management skills could be stronger, and I am constantly working to improve them.

In response to Question 2, "What are some of the projects you spearheaded and their outcome, like did they save the company any money?", one sample response was:

At one of my first marketing and public relations positions, Shape Salon, I created a marketing plan to help increase their local business. I encouraged the salon to offer locals (and those they recommended) incentives to visit and get their services done there—get a free blow out with any chemical service, ten percent off retail products, etc. I also reached out to local businesses and offered similar incentives. By implementing this marketing plan the salon saw a 33 percent increase within six months.

The quality of students' questions and the depth of their responses demonstrate the level of ownership and accountability when the teaching and learning experience is a shared process and students become engaged in communities of practice, which was defined by Wenger, McDermott, and Snyder (2002) as "groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis."

As educators, we are often faced with the challenge of framing discussions around social media and the use of technology in ways that encourage dialogue, as opposed to critique. While faculty in this initiative encouraged students to be social, the objective of Assignment 4 was to stimulate dialogue about the appropriate use of technology and social media within a work and classroom setting. Students were thus able to challenge their own and others' perspectives about social media and technology etiquette.

In Assignment 5 students gained valuable exposure to the LaGuardia & Wagner Archives, which is home to

the Steinway & Sons collection of artifacts. Students were also required to calculate key financial metrics for Steinway & Sons, compare their results to those of their partner, and, if applicable, propose revisions. Therefore, this assignment provided students with the history of the company and with relevant financial information that they could use in preparation for an interview with the Human Resources Director of Steinway & Sons (see Assignment 6).

Based on faculty conversations about helping students envision and build new identities as learners and emerging professionals in the Art of Advising professional development seminar, Workshop 1: Resume Preparation Workshop aimed to give students an opportunity to edit existing resumes or to create a resume. During the workshop, students received and discussed valuable information regarding appropriate resume language and information. Workshop 2: Job Interview Preparation Workshop exposed students to the effective use of verbal and non-verbal communication in an interview setting. Moreover, simulated interviews allowed students the opportunity to interview each other using some of the interview questions they had generated in response to Assignment 3 and the techniques they had learned in the workshop. After the simulated interviews, students spent time discussing what they had learned.

Assignment 6, the final assignment, provided students with an opportunity to integrate what they had learned from the previous assignments and workshops in order to develop thoughtful responses to questions that could be posed during an interview at Steinway & Sons. Because LaGuardia has an internship program, the fact that this initiative concluded with having students prepare for this interview was very helpful for the students, as they are bound to engage in interviews during the internship process. This assignment also brought students full circle, as they reflected on their learning and growth and the learning of their peers during the semester.

The culminating piece to this semester-long project entailed students having a dialogue with one another and with industry professionals who do the hiring. On May 1, 2013, students participated in an event titled Career Advisement Forum: Planning for Success. This event consisted of two parts: a panel discussion and a career fair. The panel discussion provided students with the opportunity to interact with each other and with business professionals from Steinway & Sons, AOL Inc., Corporate Board Member—an NYSE Euronext Company, Delonghi, and Collaborative Arts Project 21—to strengthen students' understanding as to what it takes to create and navigate a roadmap for career success. The panel discussion was followed by a networking and career fair, which presented students with the opportunity to network with one another and

with representatives from various companies to learn more about those companies and about the internship and career opportunities that they offer.

At the conclusion of the semester, the faculty conducted surveys to gauge students' perceived improvement in their development as it relates to career readiness as a result of their involvement in the Principles of Accounting I advisement initiative. The survey has been included in Appendix B with detailed results in Appendix C. The survey results indicated that 38.46% of respondents rated their knowledge about career readiness as strong or very strong prior to the commencement of the initiative. 97.56% of respondents perceived a significant or very significant improvement in their knowledge at the conclusion of the initiative. Of the respondents polled, 57.69% rated their knowledge of ePortfolio prior to completion of the initiative as strong or very strong. 94.87% of respondents saw a significant or very significant improvement in their knowledge of ePortfolio.

### **Reflection as Integrative Social Pedagogy—General Chemistry I Initiative**

In the General Chemistry I course, the aim was to use reflection as a tool to foster integrative social pedagogy. Some of the design elements and goals of social pedagogies, as defined by Bass and Elmendorf (n.d.), are that students participate in an intellectual community so that they develop the ability to give and get feedback, that they engage with authenticity and difficulty so that they develop deep and contextualized understanding, and that they represent knowledge for an authentic audience so that they develop a sense of voice and purpose specific to a domain or community.

The practice of posting written reflections on their learning in response to particular assignments and the course as a whole, as well as the process of learning, is an integral part nationally of ePortfolio practice (Eynon, 2009). Reflection can be described as a process through which students can actively examine and articulate their thoughts on a course, a learning artifact, or more general experiences (Tosh et al., 2006). It focuses on the writer's learning experience itself and attempts to identify the significance and meaning, primarily for the writer, of a given learning experience (Fink, 2003). Reflection can also develop critical skills for functioning effectively in diverse and complex practical realities (McGuire, Lay, and Peters, 2009), such as those encountered in professional practice. In the General Chemistry I initiative, reflective writing within the ePortfolio fostered social pedagogy by helping to create within the class an intellectual community that engaged with authenticity and difficulty and in which students learned to think and write like a scientist. It did so by facilitating social interaction between the students

for the purpose of improved learning and by providing an intellectual space for students to reflect on this social interaction and the opportunities it provided for personal, academic, and professional development.

**Initiative structure.** At the start of the semester, students in General Chemistry I were assigned to three-person teams for the laboratory section of the course. Within these teams, students would conduct experiments and prepare collaborative laboratory reports on a weekly basis. Students were assigned reflective writing assignments at the beginning and the end of the semester, as noted in Appendix D.

**Students reflecting on self and others.** For the first reflection assignment at the beginning of General Chemistry I, students were asked to write an About Me essay in their ePortfolio. This was an introductory essay, which focused on the students' educational goals and prior curricular and co-curricular experiences. In light of the approaches faculty examined in the Connected Learning professional development seminar for using ePortfolio to foster integrative learning, student interaction, and connections, students were then asked to read the About Me page of their team members and respond with a short reflective piece about what they found interesting or unexpected about each one. Students shared this reflective essay with each other and the faculty through the ePortfolio.

The ePortfolio About Me assignment asked students to become more aware of themselves as learners in the context of their past, their present, and their future aspirations. It also asked them to reflect on themselves as team players, detailing the skills and qualities they already had and the skills and qualities they needed to develop. By asking them to reflect on others' essays, the assignment also proved successful as an icebreaker activity by introducing team members to each other on more than a superficial level. From the outset, the team members seemed to develop respect for each other's accomplishments and goals and discovered that they shared similar backgrounds and interests. For example, one student commented:

Like me, \*\*\* is the first person in her family to attend college. She and I both moved to the US while we were very young and were raised by strong single mothers . . . she inspires me to keep doing well for myself and my family.

This recognition of commonalities, as well as accomplishments, would certainly have contributed to the harmonious working relationships observed over the semester. This reflection assignment thus became the first step in building the trust and respect necessary to create a vibrant intellectual community.

**Peer mentoring and collaboration.** The laboratory teams in General Chemistry I were designed

to model the workplace environment; in the description of the team assignments, students were told that most scientific work today takes place with teams of scientists, sometimes multidisciplinary, who bring their own particular skills and resources to a research problem and write the final articles submitted to peer-reviewed journals. Similarly, students would have to work with peers to conduct experiments and write laboratory reports. Every student was assigned specific tasks for each report, which was then reviewed by the other team members; the feedback obtained was then used to improve the report prior to final collation and submission to the faculty.

In keeping with the Connected Learning seminar goal of fostering student connections, the teams were deliberately constructed by the faculty to include a range of academic abilities and experience with chemistry in order to facilitate peer learning and peer mentoring. Prior to this initiative, students self-assigned to lab groups and worked together only to carry out the experiments: the collaboration ended once they left the laboratory. This team structure was therefore another important way of promoting learning through social pedagogy; as students formed an intellectual community within their teams, they engaged with authenticity and difficulty in the form of the laboratory inquiries that they had to carry out and the writing of reports that conformed in both format and voice to the standards of the scientific community. A critical component of the report is the discussion, in which the students have to make sense of and discuss the significance of their results. Here they would have to learn to negotiate, to disagree, to come to shared understanding, and then to express this understanding in writing. Peer mentoring emerged without any prompting by the faculty: academically stronger students helped those needing more support understand the concepts and procedures; native English speakers helped non-native speakers by becoming the language editors for group reports; those stronger in mathematics explained the calculations, and so on.

In their end-of-course reflective essays, General Chemistry I students were almost unanimous in rating the teamwork highly, even while confessing to initial trepidation at the prospect of group work. They acknowledged how much they learned from each other and showed a sophisticated recognition of the fact that the faculty member was not the only source of knowledge in the room. The excerpt below encapsulates what many students expressed in their essays.

Working together, we . . . got a chance to learn something new from each other every week. With the ideas from all the group members, we corrected our lab reports and got to learn how to write an excellent lab report. The advantages of working in



a group were that we did not have to just rush and finish the lab without learning anything. Moreover, whenever one of us was confused the other two tried to explain and answer the questions. That for me was really good because I got to learn the topics I was confused about from class from my team.

Thus, through written reflections on the team experience and process, students recognized that they had created intellectual spaces in which they learned to give and get feedback, deepening their understanding of the course material either by having to explain it to someone else or having it explained to them.

**Developing “voice”:** Learning to think, speak, and write like a scientist. Bearing in mind the Connected Learning seminar goal of maximizing ePortfolio’s potential as a teaching and learning tool, each week the faculty member would choose one report to be published on her public ePortfolio page as a way of providing General Chemistry I students with an external audience. At the end of the semester, students also uploaded to the ePortfolio two or three examples of their best work to serve as a learning artifact of the course. Students therefore learned to write with external audiences in mind. Once again, the reflections provided insight to both the students themselves and the faculty about the development of academic skills, both general and course-specific. They showed how students began to learn how to think and speak like a scientist/chemist, to develop that “sense of voice” specific to the scientific community: “[The course] helped me develop another important skill that I did not learn from my previous chemistry class. That is writing presentable lab reports” and “The skills that I needed [included] critical thinking—using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.”

**Looking ahead: Reflection and professional development.** Through the reflective writing assignment at the end of the General Chemistry I semester, the ePortfolio also served as a vehicle to help students recognize the effect of the experiences in the course and of the teamwork on their professional development.

Students acknowledged the teamwork as valuable rehearsal for what they might experience in their future professional lives:

Working in a team in the lab will be the same exact thing I will have to do in the clinic . . . At the beginning of the semester I was dreading it but in the end it helped me with some skills that I will need once I start working in a clinic.

Other students reflected on their personal growth and development that was facilitated by the interactions occurring in the teams:

I developed a lot of new skills as a result of working in a team. I learned to take risks and trust my ideas by working in a group because my ideas were appreciated and taken in a friendly manner. I learned to work with other people without any conflict and learned to accept others’ ideas.

Through their guided reflections, the General Chemistry I students began to recognize and value the process of learning and not just the product (e.g., chemistry knowledge). These reflections, archived in students’ ePortfolios and available to them long after the course is over, provide students with an opportunity to integrate their learning by transferring these new skills to new courses and new situations. See Figure 3 and Figure 4 for screenshots of students’ work in the General Chemistry I course.

### Conclusion

Faculty observed that the yearlong Art of Advising and Connected Learning professional development seminars served as the catalysts for developing assignments and activities that succeeded in helping students to obtain, retain, apply, and share knowledge within intellectual communities. Furthermore, faculty recognized that although the experiences in professional development seminars provided a basis for classroom practice, effective implementation required careful refining of the assignments for seamless integration into the courses. Effective classroom implementation was facilitated by the structure of the professional development seminars in that assignments and activities were developed during the Fall semester and then implemented and reworked during the Spring semester. Faculty also concluded that in order for professional development to be truly meaningful, it should be linked to classroom practice, so that faculty learning enhances student engagement. Through the Principles of Accounting I and General Chemistry I initiatives, faculty experienced the significance of professional development in promoting transformative pedagogies, such as integrative social pedagogy, in the classroom.

Intentional, integrative social pedagogies enable learners to create their own learning or social communities, which can be an engaging environment—learners can use this for everyday activities, keeping in touch with each other, finding the latest resources, and sharing their own experiences (Tosh et al., 2006). Learners, especially in a so-called urban commuter college such as LaGuardia, need help in forming social communities and connections that can enhance learning and aid in retention and completion. Furthermore, when these social communities exist within an online platform such as ePortfolio, they allow communities of

Figure 3  
General Chemistry I Course—Student Work

The image shows two parts: a website on the left and a Microsoft Word document on the right. The website is for 'Fundamentals of Chemistry I' at LaGuardia Community College, taught by Prof. D. Miller in SCC 201-1757. It features a navigation menu, a title 'Fundamentals of Chemistry I', a photo of a science experiment, and a table of lab reports. The Word document is open to a page with the following text:

SCC 201, 1757  
Prof. Miller  
March 22, 2010

When I read Ruth's ePortfolio I was surprised to learn that she was in the Israeli Army and has traveled to many parts of the world. It is wonderful to find anyone who joins an army but even more wonderful when it is a strong woman. It is great that Ruth is very open-minded and has experienced different things in life that the ordinary person has not experienced. Ruth is an interesting individual who has seen and learned a lot early in life.

I found it interesting that *Jeurly* is so passionate about learning French and studying abroad in France. It is a difficult task to learn a new language as an adult and it is even more difficult to learn a new language when studying in college. The fact that *Jeurly* is willing to go across the world and learn new things is impressive.

Figure 4  
General Chemistry I Course—Student Work

The image shows a screenshot of an ePortfolio page for 'SCC201' at LaGuardia Community College. The page has a navigation bar with 'Home | Calendar | People | Courses | e-Portfolios | Subscriptions' and a user greeting 'Welcome, DIONNE | Logout | More | HELP?'. The main heading is 'ePortfolio @LaGuardia Community College'. Below this, there are links for 'Home | About Me | SCC201'. The content area is titled 'SCC201' and includes a section for 'Reflections' and 'Lab Reports'. The text in this section discusses the author's experience working with lab partners Sachin, Rosali, and Helen, and their shared interests and goals. At the bottom, there are links for 'Show Comments and Tags', 'LaGuardia Community College | LaGuardia's ePortfolio Initiative | Terms of Use | Privacy | Contact Us', and 'Platform provided by Digication, Inc. Copyright © 2010. All rights reserved.' There are also 'Subscribe' and 'Email To A Friend' buttons.

learners to develop and flourish beyond the physical and temporal boundaries of the classroom.

From the reflections and student interactions in both the Principles of Accounting I and General Chemistry I courses, it was evident that the sense of belonging to a community of learners and the ability to share goals, challenges, experiences, and resources with other learners can engender a sense of confidence. Of great importance was the recognition by students that they could become contributors to and not just recipients of knowledge and that the faculty was therefore not the only source of knowledge in the classroom.

Students in the targeted courses recognized the commonalities between the assignments and activities that they completed and the professional environment they aspired to, thus enhancing their learning through contextualization. In both the Principles of Accounting I and the General Chemistry I course, faculty observed that students exhibited “a quality of being present to the nature of the experience and an openness to its potential meanings” (Rodgers, 2002, p. 850) in order to find value in the information and the process of sharing, interpreting, and making meaning of it. To that end, contextualizing instruction facilitated a successful approach not only to working within the discipline, but also to helping students think across the disciplines and their experiences as they endeavored to frame a career path.

Peer mentoring activities allowed students to experience various facets of teamwork, which enhanced their understanding of the importance of teamwork within a professional environment. Students engaging in conversation with peers could confirm their knowledge or experience cognitive dissonance; either result validates and gives meaning to a student’s efforts.

From the faculty’s perspective, the goal of increasing engagement and learning through student to student connections was achieved. In the General Chemistry I course, this was evidenced not only by the reflective essays but also by a significant improvement in course performance: all groups submitted all of the required 10 laboratory reports, and the average lab grade improved from 70% to 82% when compared to prior semesters taught by the same faculty. Even though this was not stressed, students also reported feeling a greater sense of connection to the faculty based on the end of semester, college-administered student evaluation scores, which were compared to scores for the same faculty in the same course without ePortfolio. In the Principles of Accounting I course, increased engagement and learning through student-to-student connections was evident when 97.56% of survey respondents perceived a significant or very significant improvement in their knowledge about career readiness. Through this initiative, faculty learned that advisement

as integrative social pedagogy is about providing students with the opportunity to share, listen, question, and learn from personal experiences as well as the experiences of others. Rather than just being about course selection, advisement evolved to let students link academic, transfer, and career issues in their disciplines and help them make informed decisions. Thus, when advisement became a community affair, moving beyond its prescriptive boundaries to target instead the whole student, students were learning and engaged.

Finally, ePortfolio provided a robust, facile means for facilitating the implementation of an integrative social pedagogy. Through the assignments, activities, and reflections, recorded and shared in their ePortfolios, students explored in a much deeper fashion what they learned from the course, beyond the fundamentals of accounting or chemistry.

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Appendix A  
Principles of Accounting I: Career Advisement Initiative—Assignments and Workshops

**Assignment 1**

Begin work on the About Me section of the course ePortfolio. This section should include the following:

- A paragraph about who you are.
- A professional picture of yourself.
- What are your short-term and long-term academic/professional goals? What immediate action steps can you take to accomplish these goals? Specifically, what skills do you need to further develop in order to achieve your long-term goals?

**Assignment 2**

In order to build a community of connected and active learners, review the About Me section of the colleague (from the other class) you were assigned to work with on this project (see Student Pairs List). Using the Comment feature, provide **constructive and useful** feedback as it relates to the following:

- What do you notice about your colleague's About Me? Did anything grab your attention?
- Did your colleague thoroughly address all of the requirements of Assignment 1? If not, what aspects of your colleague's About Me do you believe he/she could refine and strengthen?

**Assignment 3**

Preparation is key to obtaining employment. Part of being prepared is knowing what questions you may be asked, and being ready with responses to these questions. **Note:** Assume that you are interviewing for the position of Staff Accountant with Steinway & Sons.

For this assignment, **students in Group 1** (see the Participant Workspaces tab if you forgot your group number) **from both classes** will be the **Interviewer**. As the Interviewer, each student will perform research (and cite sources where necessary) and list 2 questions they believe that a potential interviewer may ask an interviewee. Try not to repeat questions already asked by other colleagues. **Important Note:** On the left of this ePortfolio page, you will notice that a template was set up for you to document your questions.

For this assignment, **students in Group 2** (See the Participant Workspaces tab if you forgot your group number) **from both classes** will be the **Interviewee**. As the Interviewee, each student will respond to 2 questions presented by the interviewer. Try not to answer questions already responded to by another colleague, unless your answer is very different. **Important Note:** On the left of this ePortfolio page, you will notice that a template was set up for you to document your responses.

**Assignment 4**

*New York Times* article - [Click Here](#) to Download.

Read the *New York Times* article included in the link above carefully. Insert a new module in your workspace, with the title "Turn Off the Phone (and the Tension)," and then answer the following questions relating to the article.

- In two to three sentences, discuss the objective of this article.
- Do you agree with the author that as a society we are over-communicated? Why or why not?
- How, if at all, would you alter your **social** screen time:
  - When preparing for, and participating in a job interview?
  - During working or class hours?

**Workshop 1: Resume Preparation Workshop**

This workshop will consist of a discussion followed by a hands-on resume preparation activity.

**Required:** Document two key points from this workshop that you found helpful and how you will use them in future.

**Assignment 5**

Insert a new module in your workspace to complete **both parts** of this assignment.

**Part I:** In no more than 200 words, analyze the role that Steinway & Sons has played in the history of Queens and New York City as it relates to **ANY ONE** of the following: Immigration, Business, Culture, and Labor. **Note:** The instructor will schedule a class visit to the LaGuardia and Wagner Archives—The Steinway & Sons Collection, located right here at LaGuardia Community College, Room E-238. This will provide an opportunity for all to learn about the rich and influential history of Steinway & Sons.

**Part II:** Download the extract ([Click Here to Download](#)) from the Form 10-K of Steinway Musical Instruments, Inc. and Subsidiaries, and complete all requirements listed below.

- Calculate the Dollar and Percentage change in Gross Profit from 2010 to 2011. In addition, identify **at least two** possible reasons for the change in Gross Profit.  
Hint:  $\text{Gross Profit} = \text{Net Sales} - \text{Cost of Sales}$
- Calculate the Dollar and Percentage change in Net Income from 2010 to 2011. In addition, identify **one item** that contributed significantly to this change in Net Income.
- Refer to the work done for Part II by your partner (see Assignment 2 above for your assigned partner under the Student Pairs List) and compare your answers. In the **Comments section** of your partner's workspace state whether you agree with their results or not. If you disagree, provide your partner with proposed revisions.

**Workshop 2: Job Interview Preparation Workshop**

This workshop will provide students with an opportunity to enhance their oral communication and interview skills.

**Required:** Document two key points from this workshop that you found helpful and how you will use them in future.

**Assignment 6: Reflection**

During an interview for the position of Staff Accountant with Steinway & Sons, the Company's Human Resources Director asked you to respond to the following:

**Required:** Share your responses to these items with the Company's Human Resources Director.

- Briefly tell me about yourself.
- What are your strengths and weaknesses?
- Where do you see yourself five years from today?
- List **two** things that you learned about the Company from the Principles of Accounting I: Steinway Research Project.
- List **one** thing that you found the most interesting about the work you completed for the Principles of Accounting I: Steinway Research Project.
- Do you have any questions for me?



Appendix B  
Principles of Accounting I: Career Advisement Initiative—Student Survey

1. Check which applies to you. I am a:

1st Semester Student     2nd Semester Student     3rd Semester Student     4th Semester Student

2. How would you rate your knowledge about Career Readiness prior to completion of this Project?

Very Weak                  Weak                  Average                  Strong                  Very Strong

3. Do you perceive an improvement in your knowledge about Career Readiness after completion of this project?

Yes                   No

If Yes, to what extent?

Not Significant                  Significant                  Very Significant

What areas did you notice the most improvement?

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4. How would you rate the contribution of the Resume Preparation Workshop to your knowledge about Career Readiness?

Not Significant                  Significant                  Very Significant

5. How would you rate the contribution of the Interview Preparation Workshop to your knowledge about Career Readiness?

Not Significant                  Significant                  Very Significant

6. Note the part(s) of the Project you considered the most challenging. Why?

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7. How would you rate your knowledge of ePortfolio prior to completion of this Project?

None                  Some                  Strong                  Very Strong

8. Do you perceive an improvement in your knowledge of ePortfolio after completion of this project?

Yes                   No

If Yes, to what extent?

Not Significant                  Significant                  Very Significant

How did ePortfolio facilitate your understanding and completion of this Project?

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Appendix C  
Principles of Accounting I: Career Advisement Initiative—Student Survey Results

How would you rate your knowledge about Career Readiness prior to completion of this Project?	<b>Very Weak</b>	<b>Weak</b>	<b>Average</b>	<b>Strong</b>	<b>Very Strong</b>
	1.92%	9.62%	50.00%	30.77%	7.69%
Do you perceive an improvement in your knowledge about Career Readiness after completion of this project?	Yes	No			
	82.69%	17.31%			
If yes, to what extent?	Not Significant	Significant	Very Significant		
	2.44%	87.80%	9.76%		
How would you rate the contribution of the Resume Preparation Workshop to your knowledge about Career Readiness?	Not Significant	Significant	Very Significant		
	3.92%	58.83%	37.25%		
How would you rate the contribution of the Interview Preparation Workshop to your knowledge about Career Readiness?	Not Significant	Significant	Very Significant		
	0.00%	30.77%	69.23%		
How would you rate your knowledge of ePortfolio prior to completion of this Project?	None	Some	Strong	Very Strong	
	5.77%	36.54%	44.23%	13.46%	
Do you perceive an improvement in your knowledge of ePortfolio after completion of this project?	Yes	No			
	80.77%	19.23%			
If yes, to what extent?	Not Significant	Significant	Very Significant		
	5.13%	71.79%	23.08%		

Appendix D  
General Chemistry Course—Assignments and Activities

**Activity 1**

In this course, you will be working as part of a three-person research team in the laboratory classes. Your team members have been assigned to you by the instructor. As a way of getting to know your team members, do the following:

- Share your ePortfolio with your team members.
- View the About Me section of the ePortfolios of your other team members.
- In the reflection section of your ePortfolio, write and post a short paragraph about something you found interesting or unexpected about each team member.

In a new document, make a table with two columns. In the first column, list the qualities that you think are important when working with a group of people toward a common goal. In the second column, list the qualities/strengths that you believe you already possess that will make you a good team member. You are not required to include this in the document, but also think about the qualities that you think you need to develop to become a better team member.

**Activity 2: End of Course Reflection****Reflecting on the Course**

In this course we have explored some of the fundamental principles and concepts of chemistry. We have tried to lay a foundation for further study in chemistry with the expectation that you will go on to do part II of the course and then apply this knowledge to further studies in engineering, health-related fields such as nursing and pharmacy as well as to your everyday life.

Please answer as thoughtfully and honestly as possible the following:

- Do you think you have developed more awareness of chemistry in your everyday life as a result of taking this course? If yes, in what ways?
- What topics, if any, do you think will be most relevant to your career goals? For example, if you hope to be an engineer, what topics do you think would be most relevant as you continue to further studies?
- What did you find most challenging about the course? What skills did you have to develop to meet those challenges? What skills did you have to use that you gained from other courses or from life in general?
- Having completed the course, do you think you learned a lot or a little?
- What advice would you give to someone planning to take this course next semester (apart from taking a different professor)?

**Reflection on Working in a Team in the Laboratory**

As stated at the beginning of the course, modern scientific research involves teams of scientists in an interdisciplinary approach. A survey of scientific research articles would show that the vast majority of papers have several authors who collaborated on a project. Each person brings their own resources, skills and expertise to the project. You were asked to work as a “research team” in the lab this semester.

Please answer the following as thoughtfully and honestly as possible:

- What was your overall experience of working in a team?
- What were the advantages and disadvantages of the team approach? What did you like most about the team? What did you find most challenging about the team?
- Which skills did you find most useful in negotiating the team process? Do you think you developed any new skills as a result of working in a team?
- How do you think working in a team in the lab compares to what you might experience when you have a full time job in your particular field?
- What advice would you give to someone planning to take this course next semester (apart from taking a different professor)?