

The Promise of E-Portfolios for Institutional Assessment

Einstein: $E = mc^2$

Teacher: B+ Good answer, but next time, please show your work.

Introduction

In his book *Making the Most of College: Students Speak Their Minds*, Harvard professor Richard Light reports “When we asked students to think of a specific, critical incident or moment that had changed them profoundly, four-fifths of them chose a situation or incident outside the classroom” (8). Until now, however, colleges have been unable to measure this opportunity for learning that has such a powerful and profound impact on our students’ lives.

Similarly, we have proven inadequate to the task of making explicit the links between the learning that takes place across unique courses, especially between the liberal arts (or humanities) and discipline-specific courses. Although college mission statements often reference life-long learning or critical thinking, we generally fail to provide students with a structure or design that will inspire them to make the connections between the writing, thinking, and analytical skills that make such learning possible.

The experience of Thomas College, a small, liberal arts college in central Maine, shows that E-Portfolios represent a potentially powerful tool that can create those explicit, practical connections. Additionally, E-Portfolios demonstrate great promise for assessment at the institutional level.

Central Research Question

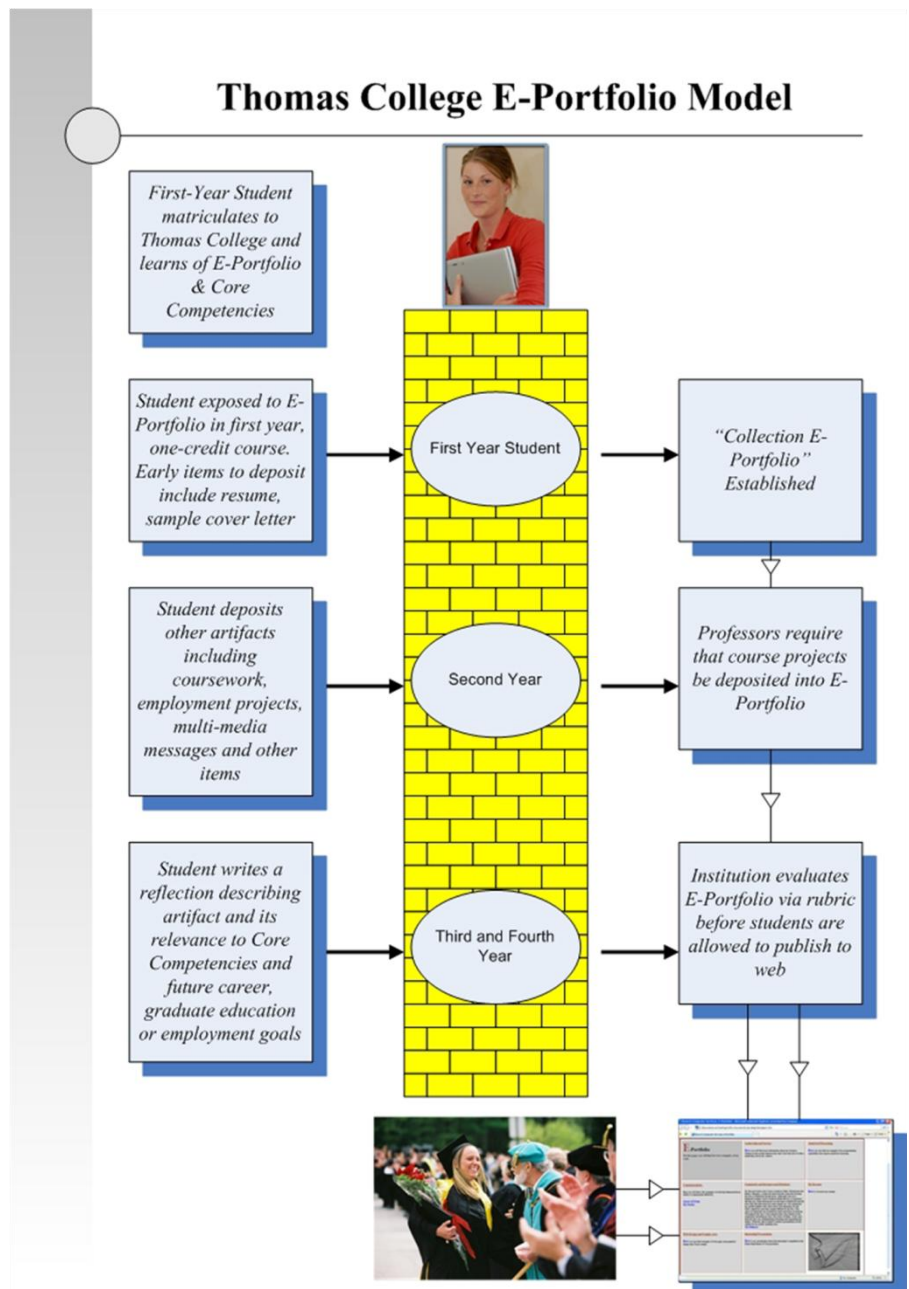
The mission of Thomas College is “to prepare students for success in their personal and professional lives, and for leadership and service in their communities.” Furthermore, the College offers guaranteed job placement for its graduates. Before the implementation of an E-Portfolio program, there was no effective process in place to

document how distinct parts of the curriculum at Thomas provided the comprehensive experience that makes such a guarantee possible.

A first positive step was the creation of the faculty-defined set of four core competencies, which are categorized as: communications, leadership and service, critical thinking, and community and interpersonal relations. However, the College lacked a vehicle whereby students could demonstrate how those skills were developed and applied throughout their college career. For their part, faculty lacked a common method for relating specific course materials to the overall college mission, or to the more general core competencies.

The solution came in the form of an E-Portfolio model developed with the assistance of the National Coalition on E-Portfolio Research.

As a result of the incorporation of an E-Portfolio model, students are now introduced to the concept and the process of creating E-Portfolios in their first year; faculty have adopted a common requirement to link each course offered at Thomas to one of the core competencies; and a growing number of senior capstone courses include the requirement that the students complete an E-Portfolio. The evaluation of a set of student E-Portfolios in the spring of 2007



demonstrated that E-Portfolios provide a powerful tool for students to integrate their learning across course boundaries, and to showcase their skills. As students go through the process of collection, selection, and reflection, they show the ability to identify the larger design that informs their college experience.

The Model

Students in the College's first-year experience course are introduced to E-Portfolios and to the College's core competencies. They are given instruction and assistance for creating individualized folders for each core competency, and encouraged to store examples of their personal and academic work as they progress through their academic career.

Type	Name
Folder	Analytical Reasoning
Folder	Communications
Folder	Community and Interpersonal Relations
Folder	Leadership and Service
Folder	Resume

A list of sample artifacts that students can use to demonstrate achievement is provided to students for each competency area. The identification on each syllabus at the College of course assignments that are particularly relevant to specific core competencies reinforces the concept that all courses—both liberal arts and major discipline requirements—are part of a larger design. For example, the development of an excel spreadsheet in a math or an accounting course could qualify as a contribution to the category of “analytical reasoning.” For the core competency in leadership and service (“Thomas students exhibit a command of interpersonal, leadership, and teamwork skills, and demonstrate a commitment to community service”), students are encouraged to provide evidence ranging from their work as a resident assistant or a tutor, to their participation in community service.

Folder	Analytical Reasoning
File	Network Proposal.doc
Folder	Communications
File	Emerging Technology Paper.doc
Folder	Internship Seminar
File	Brent Bio.doc
File	cover letter pinnacle.doc
File	Dear Site Supervisor.doc
File	internship presentation letter.doc
File	Mock Interview.doc
File	Time Sheet - Expanded with Tasks.rtf
File	Week 1 Journal.doc
File	Week 2 Journal.doc
File	Week 3 Journal.doc
File	Week 4 Journal.doc
File	Week 5.doc
File	Week 6.doc
File	Week 7.doc
Folder	Pinnacle Documents
File	SQL Example.doc
File	VBA example.doc
Folder	Resume
File	cover letter pinnacle.doc
File	Resume.doc

The gradual implementation and current voluntary nature of the program, combined with the brief introduction to E-Portfolio use that students receive as they begin their academic career, predicts the relatively low numbers of active (and useful) junior and senior student E-Portfolios available for review in the spring of 2007. Nevertheless, those students who did produce an E-Portfolio seemed to grasp the value of the exercise, demonstrating a keen awareness

of the link between the core competencies and their work from various courses and experiences inside and outside the classroom. Students seemed to easily grasp both the developmental and integrative power of E-Portfolio documentation of their academic work, as evidenced in the artifacts they selected, and in the reflections they composed.

In the spring of 2007, to test the effectiveness of the E-Portfolio model as a measure of student learning (as identified by the core competencies), students in two senior seminar courses were asked to submit an E-Portfolio for review by a committee made up of faculty and staff.

Students were provided with a copy of a rubric that had originally been drafted for the purpose of adjudicating E-Portfolios residing on the college intranet that students wished to post publicly on the College's Career Services web page. The design of the rubric was not intended to assess *quality* of individual artifacts, rather to determine how appropriate the selected examples were in meeting the goals of the E-Portfolio overall. The committee reviewed a set of ten student E-Portfolios, using the rubric to assign a score to each of the four competency folders, as well as to a separate folder for reflection.

Reflection	9 points	6 points	3 points	0 points
	Portfolio includes reflection that indicates a significant appreciation of the competencies. The student identifies and describes direct links between a student's experience and artifacts and the core competencies.	Portfolio includes some reflection which indicates an understanding of the core competencies. Links between artifacts and the competencies are identified.	Reflection on the portfolio describes the content and indicates links to the competencies without providing evidence of significant understanding or appreciation.	Little or no reflection is present, or links to the core competencies are cursory or very general.

Student E-Portfolios

Chelsea Reynolds, a junior accounting major, chose a wide range of documents from a variety of different courses for her folder on “Critical and Analytical Thinking.” Chelsea’s selections included excel spreadsheets from accounting classes, math projects from a statistics class, and a company analysis project from an economics course. Interestingly, Chelsea chose a project titled “Brand You” produced in

Chelsea Reynolds > Shared Documents > E-Portfolio > Critical Thinking, Analytical Reasoning, and Problem Solving









Shared Documents

Use this document library to share a document with others. Documents stored here will be shared on your public home page.

Type	Name	Modified	Modified By
Folder	Monopoly Project	1/24/2007 4:53 PM	Chelsea Reynolds
Excel	Adam's Corp. Comp Problem (Ch. 4)	1/24/2007 4:50 PM	Chelsea Reynolds
Excel	Financial Statement Analysis Project S 06	1/24/2007 4:32 PM	Chelsea Reynolds
Excel	Minitab vs. Excel	1/24/2007 4:34 PM	Chelsea Reynolds
Excel	S.W. Collins Company Analysis	1/24/2007 4:37 PM	Chelsea Reynolds

a marketing course as a reflection piece. Chelsea’s choices reveal a clear sense of how critical thinking skills transcend the boundaries of specific projects or courses.

For her folder on Communications, senior accounting major Krista Salvas chose a number of documents key to the process of developing her career as artifacts for her folder on “Communications.” As Krista pointed out in her reflection, “The documents contained in this folder are professionally written and should give the employer a good impression when they see them.” And “I want the company that I work for to feel confident that I can represent them successfully.”

-  !Reflection
-  Application Request Letter
-  Business-Cover Letter
-  Interview follow-up
-  Purchase Order
-  Reference Request
-  Rejection follow-up
-  Resume follow-up

-  0-Leadership and Service Reflection
-  Alford Center Dedication
-  Alpha Chi Officer
-  Australearn Release
-  Australearn Scholarship
-  Class of 07 Marshall
-  Colby Leadership program with Ray Anderson
-  Governor Baldacci--Student Employment
-  Leadership Convention 2004
-  Meeting Minutes
-  Meeting the Student Senate Reps
-  Peer Advisor 2006-2007
-  Peer Advisors 2005
-  Student Leadership Dessert 2007 Invitation
-  Student Senate Rep Outcomes
- Student senator Reps for the academic year of 2006
- The election results for Student Senate representatives and class officers for the 2005

The Leadership and Service folder from senior accounting major Nicole Irish shows the power of an E-Portfolio to document a student’s growth and development outside the classroom, areas which are often missing in the shorthand of a student’s academic transcript. Nikki’s folder contains examples of her study abroad experience and her participation at off-campus events; her choices reflect her wide-ranging responsibilities as a student leader on campus. In her

reflection on this folder, Nicole writes “I chose these documents ... because to me these experiences and opportunities have formed the person that I am today and they show that I am a leader and I will work hard to be as involved as possible, because the only way to learn is to go above and beyond what is offered to you.”

As the committee worked through the process of evaluating the student E-Portfolios, several interesting differences emerged. The most striking was the varied interpretations of the reflection requirement. Several students created a standard, separate “reflection folder”; a few included formal assignments for which they had been asked to write about themselves; and some wrote a reflection essay for each folder. The last group proved quite inventive with the use of !s and 0s in the file names to “float” the reflection pieces to the top of the folder list. Krista Salvias offered a unique approach to her reflection on her leadership abilities. Krista created a PowerPoint presentation that outlines how little work she has documented in her folder in her quest to become a successful leader. Krista explained her presentation with a reflection essay, in which she writes, “This folder is quite empty. All I have documented in it is a power point on what leadership is and what it takes to be a leader. This is because I don’t feel like a leader yet. By putting this piece of work together, I have recognized where I need to begin to become a leader.”

Recommendations

The calls for assessment of student learning outcomes challenge institutions to identify appropriate means for assessing their effectiveness related to their mission. When that mission includes life-long learning, service, or learning outside the classroom, we must find creative and convincing ways to demonstrate student achievement in these areas. By using E-Portfolios to bridge the gap between mission and student achievement, we offer our students and the public a far richer, far more compelling picture of who we are, and what we do.

E-Portfolios provide colleges with a means for evaluating student achievement that can cut across disciplinary lines at an institutional level, and which can include such crucial areas such as leadership and service. The process at Thomas revealed that a single, holistic score for a student E-Portfolio will ultimately be preferable to the current rubric that derives a composite score from the ratings of each individual folder, a process that introduces too much variability across reviewer (though individual mean scores for communications or critical thinking, however, will

still be useful). In the future, a single rating system will be developed that will produce an overall evaluation of an E-Portfolio that identifies it as “proficient” or “exemplary,” making it eligible for posting on the College’s Career Services web page, as has been requested by students.

The challenge for an E-Portfolio model on any campus will be the fact that the power of the traditional measure of student learning in higher education, the stand-alone course, clearly remains. Without significant reinforcement by faculty, students will fail to view their E-Portfolios as an integrative tool for learning, or as a representation of their accomplishments. The gradual adoption of E-Portfolio requirements in senior capstone courses at Thomas College will inherently reinforce the development aspect of E-Portfolios, which faculty and students already recognize as an important part of the process of an education. Communicating with students early and throughout their academic career about E-Portfolio design and development will help to reinforce the value of the model across the campus community. Additionally, the College has identified meaningful links between its core competencies and individual items on the National Survey of Student Engagement (NSSE), the Standardized Assessment of Information Literacy Skills (SAILS) and the standards of the College’s regional accrediting association, the New England Association of Schools and Colleges (NEASC) that indicate a realistic potential use of E-Portfolios as a practical assessment at the institutional level.

The students who responded to Richard Light’s survey underscore what we have long believed to be true in American higher education: that education takes place in many ways and in many places, and that students are making connections to learning both inside and outside the classroom in ways that we cannot easily measure or demonstrate. What E-Portfolios provide is a means whereby like Einstein, we can both make the grade, and show our work.

Thomas S. Edwards, Vice President for Academic Affairs

Colleen J. Burnham, Information Resource Specialist

Thomas College

James Libby, *Integrating Professional and Liberal Education: The Thomas College Internship and E-Portfolio Models*. Poster session presented at the meeting for Business and the Liberal Arts: Integrating Professional and Liberal Education” sponsored by the Council of Independent Colleges (CIC) in Chicago, IL May 3-5, 2007.

Richard Light: Making the Most of College: Students Speak Their Minds: Cambridge: Harvard University Press, 2001