

**E-PORTFOLIOS: A TOOL FOR
ENCOURAGING AND ASSESSING
FAITH-LEARNING-LIVING INTEGRATION**

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Presented to the
Christian Business Faculty Association
Virginia Beach, VA
October 2003

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Abstract

In this paper, we examine the use of e-portfolios as an intentional tool for the integration of faith, learning, and living at a Christian university. In our literature review, we show that e-portfolios are becoming increasingly common on campuses around the country. At most of these colleges, e-portfolios are being driven by assessment or career services goals, which portfolios provide ways to accomplish. Relatively few colleges, however, are using e-portfolios as an intentional tool for the integration of faith, learning, and living. We describe a pilot program at LeTourneau University that uses e-portfolios for this purpose. We examine some of the costs and benefits of e-portfolio implementation, and look at some of the issues involved in campus-wide adoption of e-portfolios as a tool for the intentional integration of faith, learning, and living.

E-PORTFOLIOS: A TOOL FOR ENCOURAGING AND ASSESSING FAITH-LEARNING-LIVING INTEGRATION

This paper examines the use of electronic, web-based student portfolios—or “E-portfolios” in encouraging and assessing the integration of faith, learning, and living. Following an introduction, the first section of this paper selectively reviews existing literature on student portfolios, with an emphasis on E-portfolios. The second section focuses on E-portfolios as an intentional tool for developing faith-learning-living integration. The third section chronicles the development of the E-portfolio concept and the process leading to approval of a pilot program at the authors’ institution. In section four, the pilot program is described and results of its implementation are shared. The next section looks toward the future, describing the plans for full implementation of E-portfolios throughout the institution. The final section of the paper looks at the benefits, rewards, costs, and challenges of implementing E-portfolios as an intentional tool for encouraging and assessing the integration of faith, learning, and living.

Introduction

As Christian educators, we are deeply committed to the concept of integrating faith and learning. We attempt to teach our classes in ways that promote integration, and find that some classes lend themselves more easily to faith-learning integration than others.¹ Many of us strive to become models of the integration of not only faith and learning, but faith, learning, and living. We study methods of faith-learning integration to improve our teaching.² We carefully examine

¹ For example, an empirical study presented at the 2002 CBFA conference showed that Christian business professors strongly support the importance of faith-learning integration. It also indicated that a sizable gap existed between the importance of faith-learning integration and the actual levels of faith-learning integration. See Roller, Bovee, Andrews, & Walenciak, “Excellence in Christian Business Education: An Empirical Examination.”

² For example, see Richard Chewning’s excellent article, “A Dozen Styles of Biblical Integration: Assimilating the Mind of Christ.”

our students and advisees to discern if faith-learning integration is taking place in their lives, and rejoice when we see evidence that it is. We sometimes, however, become disappointed at the lack of faith-learning integration we see. Or we are frustrated that faith-learning integration has not progressed to the integration of faith, learning, *and* living. We may find that we have been used to changing a student's head, but not her heart or hands. While we may be pleased to see progress, we realize that the process of integration is incomplete without involvement of the whole person.

The processes used to promote faith-learning-living integration in many Christian colleges make accomplishing such integration difficult. A student arrives on campus to find a variety of activities available: classes, chapel, community service opportunities, mission trips, leadership opportunities, internships, social activities, spiritual activities, and many others. The student gets involved in some of these. Each activity may contribute to faith-learning-living integration, but it does so largely independently of the others. This is because different functional units of the institution, which may or may not interact significantly with each other, oversee these activities. Rarely is there much coordination between these functional units, and thus there is little coordination of the processes and activities that promote faith-learning integration. As the student proceeds toward graduation, we hope that these fragmented activities lead to integration. We hope that a well-educated, holistic graduate emerges from a series of fragmented processes. Sometimes our hopes are realized; often they are not.

What is typically lacking is an intentional design—an integrated process that plans for, encourages, and assesses faith-learning-living integration. The E-portfolio process provides one such design. The process of developing the E-portfolio adds four important elements to the process of faith-learning-living integration. The first element is intentionality. Each student is encouraged to think about his or her personal, academic, and professional development, and to formulate a plan for that development. This process is set forth in a holistic manner that encourages faith-learning-living integration and the integration of curricular and co-curricular

aspects of the college experience. The second element is documentation. The E-portfolio provides an easily updated, web-based system for documenting activities. The third element is reflection—an essential but often overlooked component of the learning process (Vince, 1998; Kolb, 1984). Students periodically reflect not only on what they have done, but also on what they have learned, how it has helped them to develop, and who they are becoming. The last element is assessment. Both regional and specialized accrediting associations have long recognized portfolios (whether notebook-based or web-based) as a direct measure of student outcomes. When implemented within an intentional framework for the development of faith-learning-living integration, E-portfolios become a tool for assessing the integration of faith, learning, and living.

Review of Selected Literature

Developing a portfolio of one's work is not a recent concept—artists, writers, and architects have done so for decades (Panitz, 1996). The concept of educational portfolios is also not ~~a new one~~. In certain fields, such as teacher education and the fine arts, portfolios have a long history. These physical portfolios were designed to document and highlight a student's best work. A few colleges adopted the use of a physical portfolio for assessing educational objectives. For example, Manhattanville College instituted portfolios in 1971 as a method for assessing competencies that the faculty determined were important for a graduate of that institution (Myers, 1996). Colorado School of Mines began a portfolio project in 1988 to fulfill a legislative mandate for an annual assessment of academic programs (Panitz, 1996).

As the World Wide Web has become pervasive in our society, the concept of producing electronic portfolios—or E-portfolios—has grown in popularity, and the range of fields of study highlighted by these portfolios has also grown. A number of institutions now require e-portfolios of all students. For example, Alverno College has required all new students to create diagnostic digital portfolios since 1999 (Young, 2002). Bridgewater College of Virginia requires each student to develop a computer-based portfolio that documents a student's development in the

areas of intellect, wellness, character, and citizenship (Watson, 2001). The goal of Bridgewater's portfolio is to develop whole persons: to encourage personal reflection, to help students set goals, to integrate the educational experience, to help a student assume ownership of his or her own educational process, to promote the mentor relationship between faculty advisers and students, to link the curriculum with co-curricular activities, and to produce a portfolio documenting skills developed by each student (Watson, 2001). Indiana University-Purdue University at Indianapolis and the University of California at Los Angeles have formed a consortium to develop e-portfolio software³ (Young, 2002). California State University at Monterey Bay, the Massachusetts Institute of Technology, the University of Washington, and the State of Minnesota university system have formed an informal consortium—The Electronic Portfolio Action Committee—to compare e-portfolio initiatives (Young, 2002).

E-portfolios have a number of uses and have been developed for a number of purposes. One purpose is assessing student learning. Portfolios can provide multiple samples of student work over time (Delmont 2003), allow an in-depth examination of skills, knowledge, learning, and development; and provide for the simultaneous assessment of multiple components of curriculum (Rogers & Chow, 2000; Siegle, 2002; Barrett, 2002). Not only do portfolios provide an authentic demonstration of accomplishments, but they also help students to take responsibility for their learning (Lankes, 1998). Ashton & Murawski (2002) suggest that the development of portfolios helps students learn to become lifelong learners, and encourage their students to maintain their portfolios throughout their professional careers.

Portfolios are also being used increasingly as marketing tools for job-seeking students. Students burn their portfolio onto CD-ROMs, or post it on the Internet, as a way of providing an in-depth look at their skills, capabilities, and character (e.g., Rogers & Chow, 2000; Elphick, 2000). According to Young (2002), more institutions are encouraging or requiring students to

³ www.eportconsortium.org

create portfolios that highlight their academic work, help them reflect on their campus experiences, and assist in landing jobs. Jones (1996) reports that the ability of portfolios to help students bridge the school-to-work gap provided significant benefits as “students were continually confronted with the connection between what they were learning and how they would apply this learning to their respective career choices” (pp. 287-8). Furthermore, “the more students saw the relationship between their coursework and their career objective, the more enthusiastic they became about the portfolio” (Jones, 1996, p. 287).

Portfolios can enhance the advisor-advisee relationship (Watson, 2001; Elphick, 2000). If a portfolio is well-designed and kept up-to-date, an advisor can learn more about an advisee by spending 15-20 minutes reading the portfolio than he or she could in spending hours one-on-one with an advisee.

Much has been written about the process of developing a portfolio initiative in an institution⁴. For example, Barrett (1998, pp. 3-4) suggests that a number of strategic questions should be asked, such as:

- What is the purpose of the portfolio?
- How will you store the working portfolio?
- How will you publish the formal portfolio?
- How will you guarantee secure assessment information?
- Can you use technology to collect observational assessment data?

Delmont (2003) suggests that the process of creating an electronic portfolio should include several steps, such as (1) select assessment measures, (2) decide who should determine what is included in the portfolio, (3) determine how the portfolio will be organized, then (4) create the portfolio.

⁴ Currently, the leading author on the topic of electronic portfolios is Dr. Helen Barrett of the University of Alaska. Her web site, www.electronicportfolios.com, contains links to a number of useful articles written by herself and others.

One of the most challenging aspects of starting a campus-wide e-portfolio initiative, according to the University of Washington's special projects coordinator, Mark C. Farrelly, is getting a substantial number of faculty involved (Young, 2002). It's also crucial that students buy into the concept, according to students at Alverno College (Young, 2002).

The Integration of Faith, Learning, and Living

In the quest of higher education to best prepare men and women for the world, we have turned from the fundamental purpose of learning in exchange for materialism and security. While colonial educators trained civil and religious leaders to guide a young nation, many institutions of higher education now train workers merely to fill occupational roles, produce, spend, and stimulate our economy. Edward Long, in *Higher Education as a Moral Enterprise*, affirms: "Higher education dares not become merely the avenue to success; it must be the gateway for responsibility ... It is not enough merely to open the mind; it is necessary to cultivate moral intentionality in a total selfhood" (Long, 1992, p. 65). In a similar statement, Neil Postman, in his book *Technopoly: The Surrender of Culture to Technology*, writes,

"In consideration of the disintegrative power of Technopoly, perhaps the most important contribution schools can make to the education of our youth is to give them a sense of coherence in their studies, a sense of purpose, meaning and interconnectedness in what they learn. Modern secular education is failing not because it doesn't teach who Ginger Rogers, Norman Mailer and a thousand other people are but because it has no moral, social or intellectual center. There is no set of ideas or attitudes that permeates all parts of the curriculum. The curriculum is not, in fact, a 'course of study' at all but a meaningless hodgepodge of subjects. It does not even put forward a clear vision of what constitutes an educated person, unless it is a person who possesses 'skills'. In other words, a technocrat's ideal – a person with no commitment and no point of view but with plenty of marketable skills" (Postman, 1992, pp. 185-186).

Higher education finds itself in this predicament primarily for the very simple reason that it is easier to give into culture than to transform culture. When the nation's operational definition of success became more money, more power, and more possessions, then by following the path of least resistance, colleges and universities educated to that end. It is vitally important, therefore, that we, as Christian educators, claiming to incorporate faith, learning, and living, be

able demonstrate the difference educationally and practically. While LeTourneau University embodies a commitment to technological, entrepreneurial, and professional education, our institution also desires to capture the very soul of learning, to ask the deeper questions, to aid our students in understanding the breadth of vocation, the individuality of giftedness, the foundation of faith, and the necessity of life application, in order that our students will become responsible citizens, leading and initiating transformational change in their local and global communities.

In this pursuit, LeTourneau University has established three foundational questions that provide us direction in challenging our students and ourselves to fulfill our God-given design:

- *Who have you been created to be?*
- *What have you been called to do, both individually and corporately?*
- *While you are a student at LeTourneau University, how can you begin to identify as well as develop your God-given design?*

As we and our students discover answers to these questions, our understanding of vocation is radically transformed. Vocation is not merely an occupation; it is a life calling. Christian higher education must challenge students, and remind educators, to discover God's design and to realize that their faith in God and their vocation are interrelated in profound ways. A Christian's faith and occupation cannot be separated. Therefore, Christian education must integrate faith and occupational choice, and must also create an understanding in our students, and across the learning community, that all persons are ministers who can make lasting contributions to this world, no matter where they work.

The creation of five Christian Leadership Distinctives was a key step in formalizing this effort at LeTourneau University. These five distinctives help comprise the philosophical foundation for our efforts in the integration of faith, learning, and living at LeTourneau University. In essence, they serve as our purpose, providing intentionality in our educational pursuit. The five Christian Leadership Distinctives are:

- Discovering Purpose

- Grounding Values
- Broadening Knowledge
- Deepening Skill
- Collaborating Service.

Each distinctive has both a knowledge and a behavioral outcome that provide the framework necessary for intentionally focusing on this educational journey.

Discovering Purpose

God has created each person with unique talents, gifts and passions that He seeks for them to discover, develop and use for His glory. The foundational step in understanding vocational calling is discovering who God has created you to be. This begins with an honest appraisal of strengths and weaknesses. Self-discovery empowers students to impact society in profound ways as they discover God's purpose for their lives and proceed to invest their strengths and address their weaknesses, without false modesty or overconfidence. Part of discovering purpose is in knowing what you know, but also knowing what you do not know. No matter how large the breadth of one's wisdom, the borders of one's ignorance are just as large.

Knowledge Outcome – Students should seek to deepen their knowledge of God's design in every dimension of their lives.

Behavioral Outcome – Students should seek to glorify God by fulfilling His design for them in every dimension of their lives.

Grounding Values

Character has been defined by who you are when no one is watching. At times, however, it is even more difficult to remain true to your beliefs and values when the entire world is watching. Therefore, it is imperative for students to be deeply grounded in the Christian faith. Christian leadership requires an unreserved commitment to God and His purposes in this world,

a confidence in the gospel truth, and a devotion to faith, hope and love. Fairness, courage of convictions, lifelong integrity and commitment to justice are the qualities of character that bring life, purpose, honor and humility. Leaders with a strong, grounded character are willing to give, expecting nothing in return; to sacrifice personal gain for truth; and to forego monetary success to pursue God's calling on their lives.

Knowledge Outcome – Students should be well-grounded in the Scripture, the Christian faith (including ethics), and our common Christian heritage.

Behavioral Outcome – Students should know, practice, and articulate the Christian faith and ethics.

Broadening Knowledge

In our extremely complex world, bright and talented people often hold very different views on meaningful issues. Christian leaders must not only know why they believe what they believe, but also why others believe what they believe. Engaging the world to make a difference requires an understanding of the world. Students need a sense of history, an understanding of the realities of present economic and political climates, an imagination for the future, spiritual discernment and wisdom born of prayer to give them a balanced and accurate view of the world in which they live. As students' knowledge broadens, they gain a better understanding of the world and a clearer picture of how they can initiate positive changes in the world around them.

Knowledge Outcome – Students should be broadly educated in foundational concepts that enhance life and learning for success in the global community.

Behavioral Outcome – Students should communicate, integrate, and use their breadth of knowledge and wisdom from the perspective of a Christian worldview.

Deepening Skills

Christian leaders are called to excellence in all walks of life. The deepening of professional and leadership skills enable students to excel in the marketplace and to engage society to facilitate transformational change. A high degree of competence in a chosen field of study, knowing and understanding the language and underlying principles of a professional endeavor and developing excellent communication skills are integral to ensuring success. Students benefit from active participation in lively debate, thoughtful discussions and hands-on learning environments in stimulating classrooms, laboratories and field experience. Christ-centered faculty and staff teach, mentor, coach and encourage students to develop sharp, critical thinking and analytical skills that empower them to take calculated risks that will identify them as leaders in their chosen professions, to which God has called them.

Knowledge Outcome – Students should be proficient in at least one specialized field of study.

Behavioral Outcome – Students should integrate, apply, and communicate their knowledge of their field of study, including appropriate technologies, from a Christian worldview.

Collaborating Service

Effective participation in communities requires students to learn to work well with a variety of people in a variety of contexts, to envision, initiate and lead profound change whether at home, at church, in the workplace, within the community, or across the world. Christian leaders in collaborative service meet specific needs of communities through conscientious, decisive, disciplined, persistent, and committed action. They maintain good family relationships, are servants but not in a servile manner, and are actively involved in church and community. Equipped with an unshakable faith and God-given abilities, empowered by a heavenly calling to transform the world for the glory of God, LeTourneau students seek to give all they are for a cause much greater than themselves.

Knowledge Outcome – Students should have the knowledge necessary for effective participation in communities.

Behavioral Outcome – Students should practice interpersonal and collaborative skills as responsible members of their communities.

With these distinctives providing focus and intentionality to our educational journey the issue of documentation becomes important.

LeTourneau University offers a wide variety of academic majors, ranging from business to mechanical engineering to elementary education to aeronautical science. Because of this variety of educational opportunities, we are accredited by numerous accrediting agencies, including the Southern Association of Colleges and Schools, the Engineering Accreditation Commission, the Accreditation Board for Engineering and Technology, the Texas State Board for Educator Certification, and the International Assembly of Collegiate Business Education, as well as being approved by the Federal Aviation Administration. Each of these organizations is interested in knowing if we, as an institution, are doing what we say we are doing. Prior to the E-portfolio we were able to provide anecdotal pieces of information with little or no quantitative or qualitative data. The E-portfolio allows us to begin to document the progress of students—from their arrival on campus as freshman to their commissioning as graduates. As each student records information about his or her growth and development in the five developmental areas, we have access to information that can be quantified as well as tell the stories behind the numbers.

The stories are communicated as the students are asked to reflect upon their learning experiences. Kolb (1984) makes the case that the educational experiences that a student possesses during the course of matriculation will make a much greater impact on the student's life if those experiences are processed through an intentional learning cycle. In Kolb's learning cycle are four steps—experience, reflection, conceptualization, and experimentation—leading then again to experience.

The E-portfolio provides a wonderful tool for students to reflect upon their learning experiences within a supportive environment. They are encouraged to think through and write about how each of their experiences relates to the broader educational purposes articulated by our institution. For instance, in our Human Growth and Development course students are asked to spend a certain amount of hours working within an institution where they are able to observe various people at various developmental levels. The portfolio allows these students to not only document the experience, but also reflect upon their experiences and think about how their experiences relate and impact their academic goals, their faith, and their worldview—and, therefore, how they want to live their lives.

E-portfolios provide students with intentionality in their academic pursuit, focusing them on five areas of Christian leadership development. The e-portfolios provide documentation of the educational experiences of our students. The e-portfolio provides an opportunity for our students to reflect upon their experiences leading to change in their conceptualization of the world and how they are to live within the world. The e-portfolios also allow us to assess our institution to find out if we are indeed impacting and influencing our student's lives to the extent we wish to impact and influence. Over the course of a four-year matriculation, a student will have compiled a significant amount of information that describes fully the developmental process that he or she has traveled as a student at LeTourneau University. Not only will we then be able to assess our effectiveness in educating a student at the end of his or her studies, we can also, at any point throughout that student's time at LeTourneau University, review to assess growth and development. If a student, as a sophomore, lacks educational experiences in the area of grounding values, the academic advisor can guide that student toward numerous opportunities designed to stimulate learning and growth within that area. What makes this type of assessment exciting is that it is not merely cumulative, but can give focus and even further clarification for student in the midst of his or her studies.

The E-portfolio provides intentionality, documentation, opportunities for reflection, and both cumulative and periodic assessment for our students and for our entire community.

Development and Approval of a Pilot Program

The integration of faith and learning has been a cornerstone of LeTourneau University. A hallmark of the university is our strong values-based education. Many opportunities for spiritual, personal, and academic growth are offered to students during their time at the university. This common understanding and desire is expressed in the university's theme -- "Faith brings us together; ingenuity sets us apart"—and our recently developed focus statement, "Inspired by faith, and a spirit of ingenuity, LeTourneau University integrates living, learning, and Christian leadership in a community of integrity, academic quality, and technological innovation."

In the fall of 2002, in a spirit of ingenuity and innovation, Dr. Robert Roller, Dean of the School of Business and Dr. Glenn Sumrall, Provost and Vice President for Academic Affairs, initiated an effort to explore the possibility of designing and implementing processes and policies needed to support a LeTourneau University student portfolio concept.

For Dr. Roller, the student portfolio idea began to develop while he was at Roberts Wesleyan College. The need was to develop a consistent method for the assessment of outcomes. His conclusion: it would be necessary to track a student throughout his/her years of attendance at the university.

After coming to LeTourneau University, Dr. Roller began to seek ways to prove to the IACBE that LeTourneau University School of Business was accomplishing its stated objectives. We had a need to demonstrate, through appropriate assessment instruments, that LeTourneau University integrates faith, learning, and living throughout the time a student is enrolled at the school.

Dr. Sumrall's interest began as a result of a seminar he attended during the summer of 2001, in which a representative from Bridgewater College gave a presentation on their student portfolio program (Watson, 2001). Impressed with the idea, Dr. Sumrall immediately began to

think of the great things that LeTourneau University could do by implementing such a program. The idea was to bring together a record of the personal, academic, and professional development of students in an easily accessible, web-based, online portfolio.

During this time, LeTourneau University received a grant from the CCCU to implement a program, developed by the Gallup Organization, called StrengthsFinder. We were hopeful that it would be possible to identify the strengths of each student. Our interest was in helping the student gain an understanding of his/her strengths so that the student could maximize his/her educational development via the most appropriate learning environment -- a key to his/her success.

These ideas, along with earlier work completed by the Student Outcomes Commission, initiated in 1996 by Dr. Alvin Austin, the University President, formed the foundation for the development of a student portfolio concept at LeTourneau University.

The student portfolio concept that began in the mind and imagination could not remain there. It needed design and definition. We decided it would be beneficial to have the School of Business Project Management class scheduled for spring 2002 to undertake the development and implementation of a "prototype" of the student portfolio concept. And so, on Wednesday, January 9, 2002 this class, under the watchful eye of Dr. Feezell, began the formidable project to bring to life a "prototype" of the concept. It is important to note that this decision permitted a direct and sustained involvement of students. The class was composed of twelve students who were, except for two, all seniors. This composition provided a rich and fertile environment for the exploration and development of the student portfolio concept. However, we desired to seek input from across the university community. To achieve this objective, we did the following:

- a student in the class was assigned, during the semester, as a contact for each of the deans of the various schools,

- two public presentations were conducted – one early in the semester, the other at the end; a video tape was made of the final presentation so that anyone interested in the project could review the project and see the final “prototype” of the student portfolio concept,
- a focus group with a cross-sectional representation of students was conducted by the class.

The Scope of Work (SOW) developed by the students in the class included a discussion of the objectives and deliverables of the project. The following quote from a report prepared by the students illustrates how much they were able to contribute to the development process.

Objectives

The chief aim of student portfolio project is to highlight and promote LeTourneau University students and their accomplishments to other interested persons. The specific needs of each portfolio may vary greatly depending on the student’s area of academic study and extracurricular activities. Therefore, the portfolio process should be flexible enough to accommodate a broad variety of informational formats. The specific objectives of the portfolio process are to:

- Reflect the University’s commitment to excellence and create a sense of pride in the student body;
- Increase the intentional integration of
 - Faith and learning
 - Faith and practice
 - Curricular and co-curricular elements of the student experience;
- Enhance and document the professional, spiritual, and leadership development of every LeTourneau University student;
- Establish student portfolio usage guidelines for students, faculty, and staff;
- Identify training requirements for students, faculty, and staff;
- Enhance advisor-advisee relations within each academic discipline;

- Make student posting to his/her portfolio easy and accessible;
- Have students take pride in their portfolios that reflect their individual skills, talents, and aspirations;
- Ease the transition from university life to the “real world” through experiences and situations that deal with realistic issues students will face in the future;
- Provide processes and tools so that students can publicize and market their achievements;
- Make student portfolios accessible to companies through various mediums;
- Establish policies and procedures for the implementation and use of the LeTourneau University student portfolio system.

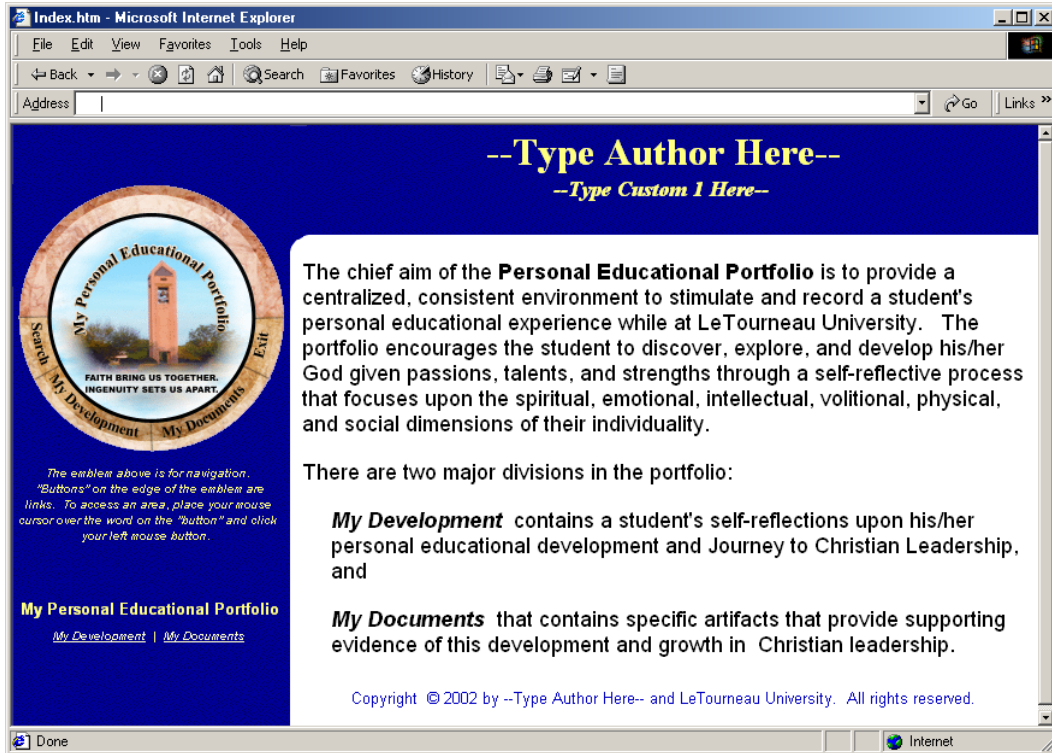
Deliverables

- Document, illustrate, and gain university-wide approval for the content and structure of a “typical” student portfolio that reflects the key outcome areas identified in the original Student Outcomes Commission report and any revisions to it;
- A formal report outlining what has been done with policies, software, contacts, and next step information;
- An open formal presentation to those interested in an explanation of the ins and outs of the LeTourneau University student portfolio concept;
- Working portfolio prototypes;
- A timetable for the implementation and operation of the LeTourneau University student portfolio system including suggested times required for training and technical support.

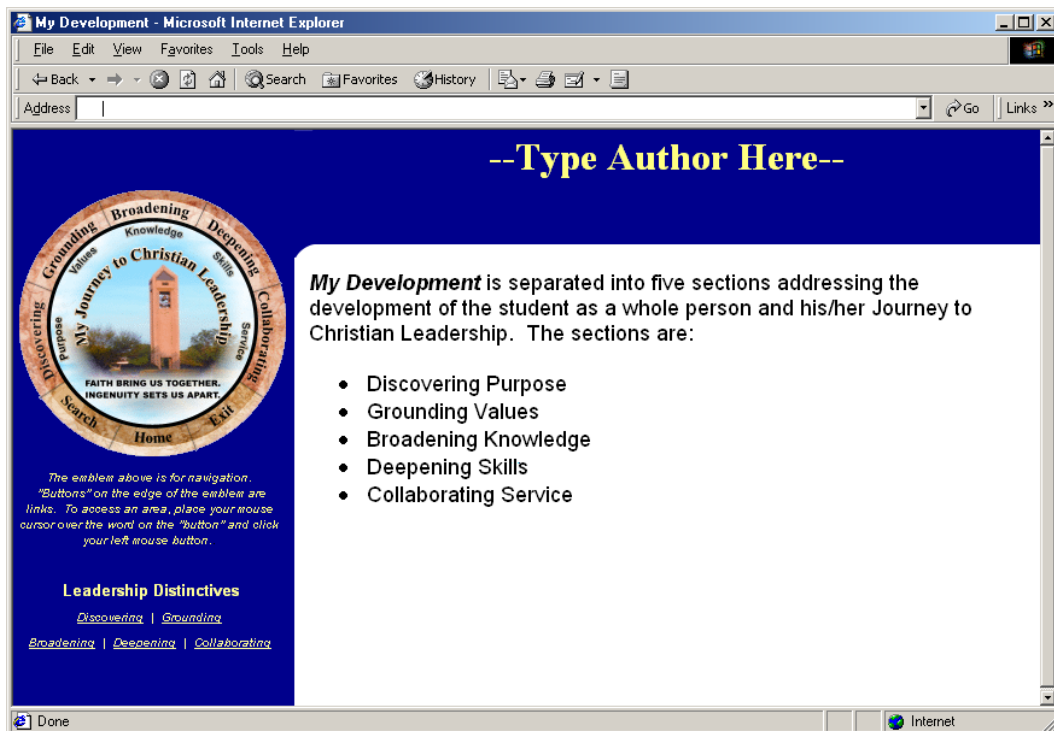
We were able to deliver each of these along with a “prototype” of a student portfolio.

The following screen images show respectively the “home page”, “my development”, and “my documents” initial sections of the “prototype” portfolio.

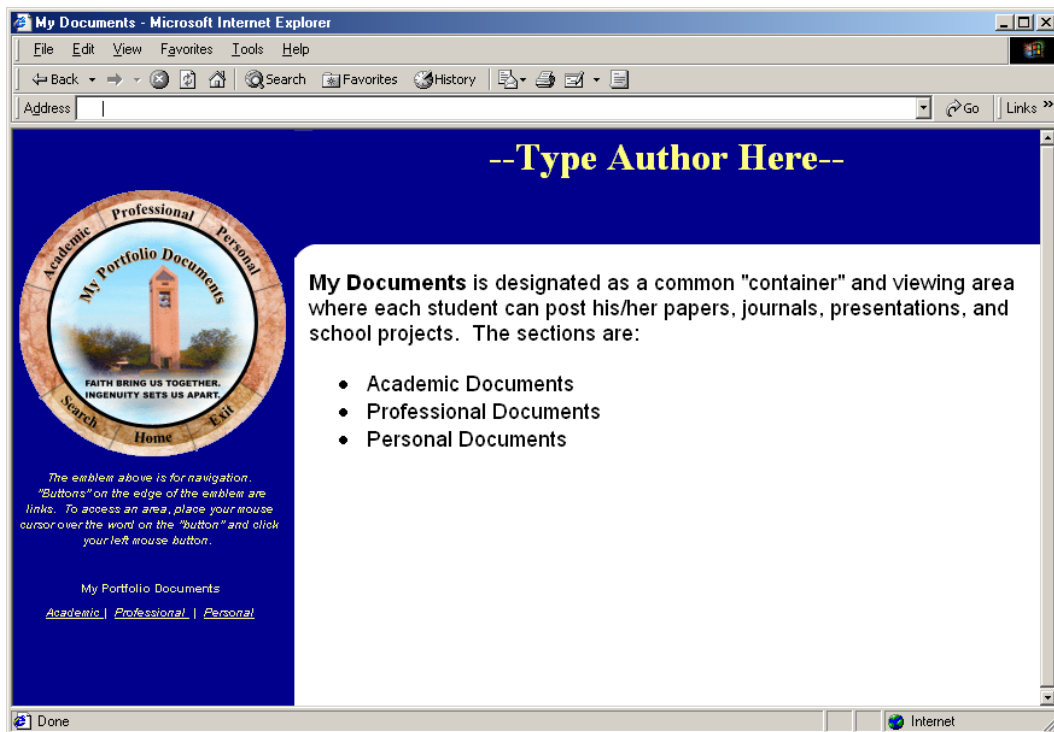
Home Page



My Development



My Documents



Pilot Program: Implementation and Results

After reviewing the work of the School of Business Project Management class and the “prototype” student portfolio constructed by them, an administrative decision was made to proceed with a pilot of the student portfolio in the School of Business during the fall semester 2002. Our plan involved placing all new business students entering LeTourneau University as freshmen into a Cornerstones of Life and Learning class (the freshman year course) taught by either Dr. Roller or Dr. Feezell. As a requirement of the course, each student was to prepare a Personal Success Plan. That plan included the following elements:

Calling and Vision: Discuss your calling and vision as you currently understand it. First, answer the following questions: Who has God created you to be? What has God called you to do, both corporately and individually? How can you begin to prepare for as well as practice that calling while you are a student at LeTourneau University? Second, based on your responses to the above questions, write a personal vision statement. This statement should not be more than two sentences in length. What beliefs, values, and experiences helped to shape this vision statement? How does this vision statement give meaning and direction to your life activities?

Development Goals: Based upon your current understanding of your calling and vision, identify and discuss your goals for personal development, intellectual development, spiritual development, and community development. Include short-range goals (to be accomplished this year), medium-range goals (to be accomplished during the next four to five years), and long-range goals (to be accomplished during the next ten to twenty years). Be sure that you develop goals that are specific, focused, concrete, observable, and measurable.

Strengths and Assets: Identify and discuss your strengths and assets that will help you to meet your goals. These may include, but are not limited to, attitudes, positive behaviors, social support, skills and abilities, and previous life experiences. Be sure that this section incorporates your results from the College Student Inventory, StrengthsFinder, the Jung Typology Test, and the VARK.

Obstacles and Challenges: Identify and discuss the obstacles and challenges that you are likely to face in meeting your goals. These may include, but are not limited to, meeting deadlines, time management, dealing with stress, writing papers, taking tests, keeping up with school work, handling finances, making friends, dealing with temptation, promoting wellness, family situations, managing relationships, and dealing with bad habits. Which of these obstacles and challenges that cause you the most worry? Explain your answer.

Action Plan: Develop an action plan for meeting your development goals. Your action plan should include specific steps or strategies to intentionally and proactively meet your development goals. Be sure that these steps and strategies incorporate the strengths and assets that will help you reach your goals and anticipate the potential obstacles and challenges that you may experience. Your action plan should be specific, focused, concrete, observable, and measurable.

Given the “Cornerstones” of the course—Personal Cornerstone, Intellectual Cornerstone, Spiritual Cornerstone, and Community Cornerstone—and the required sections of the Personal Success Plan, we needed to make only slight modifications to the course curriculum to accommodate the introduction of the pilot student portfolio.

After the conceptual modifications were made to the course curriculum, we turned our attention to the questions related to the software and hardware needed to support the pilot portfolios. These questions included, among others:

- What software will we use in the pilot?
- What training will be needed by the instructors?
- Who will train the students to use the software?
- What processes and procedures will we need to insure that the students in both classes (29 in all) are properly equipped so that each one will be able to prepare and “publish” his or her personal portfolio to the intranet at LeTourneau University?

- Who will pay for the software?

Each of these questions—and many others—were addressed as we moved forward with the student portfolio pilot. Some of them were quickly answered because of work completed by the Project Management class, while others were more difficult, requiring more time and personal involvement. One of the most difficult questions centered upon the fact that the students in the pilot project would need to “publish” their portfolios directly to the LeTourneau University intranet. This type of activity was new to us as a university and its resolution required extensive discussions between various departments. Its final resolution did not come until very late in the semester as a temporary, provisional solution. This aspect of the pilot had become a significant constraint to its full, timely implementation. A final resolution of this matter has not yet been reached by the university.

The pilot provided us with many valuable insights. One important result is that we now better understand how to manage the introduction of the student portfolio concept to new students. We also understand that the content quality of materials and the style of presentation can vary greatly from student to student. To address this, we developed a Portfolio Style Guide covering both content and style of presentation.

As we worked with the student portfolio concept during the “prototyping” and “pilot” phases, our convictions about the significance and importance of using a portfolio approach to enhance and appraise the integration of faith-learning-living became stronger and stronger.

Although we did not conduct any formal statistical evaluation during either the “prototype” or “pilot” phases, the anecdotal evidence clearly establishes the value of the student portfolio process. As advisors we discovered how little we knew about many aspects of these students’ aspirations, dreams, and personal lives. We also discovered how the portfolio could improve our knowledge of our students and how that knowledge could help us do a better job in working with each of them. The self-reflective comments of some of the students illustrate the

power of the portfolio's development process. Here are some quotes from the student portfolios:

- "The foundation of my Christian ethics is not rules but the changeless character of God."
- "Ethics is not just the rules and norms we live by, but rather how we conduct ourselves as individuals."
- "I have always had fairly decent study habits, but at times it seemed as though the professors placed some bumps in the road to make me fall. However, this school has challenged and disciplined me to help develop my mind analytically, intellectually, and critically to further reward me throughout my academic career. LeTourneau's strong and challenging academic program has taught me the true meaning of self-discipline and perseverance to the end. I now know the meaning of hard work."
- "I never thought that college would be an essential tool in guiding my personal growth as a person. I have learned to give respect to others because respect will be given to me in return. Even though there were some really tough times throughout my college experience, it has taught me to be strong, to be brave, and to seek God's guidance."
- "Standing face to face with a girl who was my age, I found something I can hardly describe. She was disowned by her family, abandoned by her lover, and abused by society. Her enormous tears and look of despair made me thankful. How could I be so blessed? How could I not share that blessing? In the affluence of the West, we can hardly fathom what it must be like to be in need. We need cars, stereos, clothes, and vacations. The rest of the world needs food, clothing, medicine, and protection. Faced with my own overindulgence, I have discovered that I want the responsibility of helping those who cannot help themselves."
- "I had the amazing opportunity to spend the fall of 2001 in Central America. Many thoughts and revelations began to make sense as to my purpose in life during my time in Costa Rica, Nicaragua, and Guatemala. In the past, I had seen poverty and realized how fortunate I am. However, these last shocking experiences became more than thankfulness to God, my family, and my friends or simply pity to underprivileged people. I know now that whatever I do in life should contribute to the good of others. I have been blessed, and a full time job should do more than pay bills, it should also play a positive role in the lives of others."
- "The older I get, the more I appreciate the beauty of learning. Many things that I have been so naïve to in my life are now more apparent. I have also uncovered the fact that the more I learn, the more I need to learn."
- "Sometimes I find it hard to find people that I really truly can relate to. The majority of my life was spent growing up in another country and this has shaped who I am to some extent. I am what some people would call a "third culture kid". I wouldn't be talking about it here if it really wasn't that important in determining who I am, but it really is. I have had the privilege of experiencing two completely different cultures, and thus am not really truly part of either, but take parts of both of those cultures into whom I am."
- "My reflections on my professional development revolve around an innate drive to be the best in my field. Much of this natural drive stems from my family life and upbringing. My father has been my professional inspiration as a natural born entrepreneur and a person who does not understand the word failure. My professional goal is to carry on his passion for business and success in every aspect of my career."

Is the development of a student portfolio worth it? Will the portfolios be beneficial to students, faculty, staff, and prospective employers? Our unequivocal, categorical answer is: ABSOLUTELY! Our experiences with the development of the “prototype” and “pilot” student portfolios provides us with complete assure that we have embarked on a sure path to the fulfillment of our desire to effectively stimulate and appraise the integration of faith-learning-living in our students at LeTourneau University.

The Future

We are now in the second year of the e-portfolios pilot project. In the first year, two sections of the Cornerstones of Life and Learning course participated in the pilot; this year, four sections—two taught by non-business faculty—are included. Our hope is that the results of the second year of the pilot result in adoption of the portfolios for all incoming freshmen in the Fall of 2004. As with any initiative of this size, the hopes, dreams, and concerns of several groups will need to be addressed, and several issues will need to be taken care of. In this final section of this paper, we examine these issues.

Faculty

Because of the e-portfolios use as a tool for integrating faith, learning, and living, many faculty members are enthused about their potential adoption. But faculty members also want to know how adoption of the portfolios will affect them, and their workload, personally. Use of the portfolios in the freshmen seminar class impacts only the faculty teaching those sections; adoption of e-portfolios campus-wide will impact all faculty members. On the positive side, the portfolios have the potential for adding significant depth to the advising process, in that they provide a relatively quick way for a faculty member to gain significant insight into the gifts, skills, aspirations, and personality of an advisee. Providing oversight of the portfolio development process, however, will require some of a faculty member’s time. Developing linkages with the curriculum at all levels—which is necessary to provide motivation for periodically updating the

portfolio—will also require substantial input of faculty time at the departmental, school, committee, and university level.

Information Technology

The technology required for the e-portfolio project is, in itself, fairly simple. Students must have access to a user-friendly portfolio development tool. This can be a web-authoring package or a specialized portfolio development package. The chief issues are likely to be choosing the software and budgeting for its purchase.

Students must also have easy access to an intranet location for storing the portfolio. Ideally, this location would be accessible from any computer in any location, using appropriate user identifications and passwords to protect the network. Eventually, the students need access to an Internet location for publishing edited portfolios suitable for job-hunting. The chief issues with server storage are server space and network security, along with appropriate budgeting.

Student Services

On our campus, the student services personnel have been enthusiastic supporters of the e-portfolio concept from the beginning. Perhaps that is because of the ability of portfolios to assist in the integration of faith, learning, and living. The portfolios help students to discover who God has created them to be. The portfolios encourage students to be involved in co-curricular activities and to reflect on the meaning of those activities. The portfolios offer tremendous potential for career services for students, as the edited portfolio eventually becomes a marketing tool for the student. The challenge for student service personnel is, simply put, having to work with the faculty, the administration, and information technology concerning practical implementation of the e-portfolios.

Conclusion

In our literature review, we showed that e-portfolios are becoming increasingly common on campuses around the country. At most of these colleges, e-portfolios are being driven by assessment or career services goals, which portfolios provide ways to accomplish. Relatively few colleges, however, are using e-portfolios as an intentional tool for the integration of faith, learning, and living. We have described a pilot program at LeTourneau University that uses e-portfolios for this purpose. We have examined some of the costs and benefits of e-portfolio implementation, and we have looked at some of the issues involved in campus-wide adoption of e-portfolios as a tool for the intentional integration of faith, learning, and living.

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