A Model for a Challenging World
Using Critical Thinking and Values for Effective Decision Making
Saint Leo University

April 19-21, 2011

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EXECUTIVE SUMMARY

Saint Leo University’s QEP, *A Model for a Challenging World*, equips students with critical thinking skills, helps students explore the Saint Leo University core values while clarifying their personal values, and prepares them to apply and link critical thinking skills and values in their decision making. Students will:

- develop critical thinking skills;
- understand and use the core values; and
- apply critical thinking and values to decision making.

Students will develop, refine, and apply these skills and abilities through their experiences in a revised general education curriculum and redesigned courses in all academic majors. The redesigned general education curriculum includes an emphasis on developing and applying critical thinking skills. It also includes an emphasis on learning about and applying the university core values. Students’ experiences in selected courses in each academic program reinforce and expand the critical thinking and core values foundation created through the general education experience.

Multiple stakeholders from across the university, including students, faculty members, staff, administrators and the board of trustees, helped focus the university’s QEP on learning that is essential to the success of the university’s graduates. The resulting QEP aligns with the school’s mission. To bring about the desired learning outcomes, a QEP director will lead this initiative. The QEP director reports to the vice president for Academic Affairs and receives guidance and support from the QEP advisory committee.

The QEP director and administrator are responsible for implementing and sustaining the QEP. The director serves on the committee charged with revising the general education curriculum. This ensures that the new general education curriculum creates learning experiences that help fulfill the QEP learning goals.

To assess student learning through the QEP and to guide ongoing efforts to improve the QEP, the university will use rubric-scored course assignments, embedded assessments, and the ETS Proficiency Profile. The director of research and evaluation for Saint Leo University is collaborating with the QEP director to assess student learning and monitor the plan’s implementation.

Over the next five years, Saint Leo University has budgeted to spend over $1,000,000 to strengthen student learning in critical thinking, the university core values, and applying values and critical thinking to decision making through the QEP.

Oversight is the responsibility of Saint Leo University’s SACS Leadership Team.
A MODEL FOR A CHALLENGING WORLD

A Model for a Challenging World, the Saint Leo University Quality Enhancement Plan (QEP), equips students with critical thinking skills, helps students explore the Saint Leo University core values while clarifying their personal values, and prepares them to apply and link critical thinking skills and values in their decision making.

The Saint Leo University Model for a Challenging World QEP builds on the university’s mission statement. In part, the mission statement declares, “On its home campus and many extension centers, Saint Leo University offers a practical, effective model for life and leadership in a challenging world [emphasis added], a model based on a steadfast moral consciousness that recognizes the dignity, value and gifts of all people.” Students’ development in learning to think critically and internalizing values in order to make effective decisions in academic work and in daily life provides the practical model of life and leadership as seen in the aspirations set forth in the university’s mission statement.

The purpose of a liberal education is “not just to get a decent job but also to lead a decent life” (Brodhead, 2004, p. 61). A college education today must be “preparation for an unknown world” (p. 63) as the Dean of Yale College told the incoming freshmen class at Yale in a prescient address on September 1, 2001. A Model for a Challenging World QEP at Saint Leo University proposes that such an education has two important components that provide the foundation for a model that students may take with them as they graduate from the university and face, as traditional students often describe it, the real world. Thus, critical thinking (which flows from a strong academic program stressing both content and critical thinking skills) and values education (which flows from Saint Leo University’s own core values and Benedictine tradition) lead to what can be described as habits of thinking producing effective decision making in academic, personal, and civic arenas. A reading of the history of the university suggests that these have long been its hallmarks. In writing the centennial history of the college, Horgan (1989) suggested that Fr. Theodore Hesburgh had articulated Saint Leo University’s aspirations at the 1984 commencement when citing as the three characteristics he felt were most essential for college graduates: competence, compassion, and commitment.

Saint Leo University’s A Model for a Challenging World QEP also has its foundations in the university’s Catholic intellectual traditions. Nichols (2009) clearly delineates these traditions when presenting principles to guide assessment. The report suggests that “assessments of student learning and institutional effectiveness are grounded in the individual missions of individual Catholic colleges and universities” (p. 38) and that they are manifested in the common elements of knowing, valuing, and doing. “Knowing includes the development of those fundamental categories of inquiry, understanding, and conceptualization, analysis, and integration” (p. 39). At Saint Leo University, the academic programs (especially with the emphasis the proposed QEP will place on critical thinking) support this aspect of “the Catholic Intellectual Tradition [that] calls us to develop the intellect and to search for truth, both of which begin in knowledge” (p. 39). The university’s emphasis on its core values supports “the Catholic Intellectual Tradition [that] calls us to transformation, a change or deepening, which is built upon essential values. Valuing is brought about by critical reflections upon learning and experience” (p.
39). The implied decision making outcome component of the proposed QEP supports the Catholic intellectual tradition’s call to act based on these categories of knowing and valuing. Thus, “doing includes drawing from curricular and co-curricular learning to inform daily actions and responses to real-life situations” (p. 39). Saint Leo University’s QEP clearly is an outgrowth of the university’s long-standing mission and the overall Catholic intellectual tradition, which it has in common with other Catholic institutions of higher learning.
DESIRED STUDENT LEARNING OUTCOMES

The goals of *A Model for a Challenging World* clearly and directly link to improved quality of student learning through:

- development of critical thinking skills,
- exploration and use of the university core values, and
- application of critical thinking and values to decision making.

**Critical Thinking Skills**

As is often noted in the literature on critical thinking, while institutions of higher education often cite the development of critical thinking in students to be a crucial goal, there is little agreement on what critical thinking actually is. Halpern (1999) notes that although there are many definitions of critical thinking, “…all of these approaches share a set of common assumptions: there are identifiable critical skills that can be taught and learned, and when students learn these skills and apply them appropriately, they become better thinkers” (p. 70).

The Saint Leo University QEP employs Halpern’s cognitively-based definition of critical thinking as “the use of those cognitive skills or strategies that increase the probability of a desirable outcome…(where ‘desirable’ is defined by the individual, such as making good career choices or wise financial investments)” (1998, p. 450). She continues by describing several aspects of what constitutes critical thinking:

Critical thinking is purposeful, reasoned, and goal-directed. It is the kind of thinking involved in solving problems, formulating inferences, calculating likelihoods, and making decisions. Critical thinkers use these skills appropriately, without prompting, and usually with conscious intent in a variety of settings. That is, they are predisposed to think critically. When people think critically, they are evaluating the outcomes of their thought processes—how good a decision is or how well a problem is solved…. Critical thinking also involves evaluating the thinking process—the reasoning that went into the conclusion one arrived at or the kinds of factors considered in making a decision. (p. 450-451)

The first component of the QEP is critical thinking. As shown in Table 1, the first student learning outcome related to critical thinking skills focuses on equipping the students with basic knowledge about critical thinking skills, and the second student learning outcome focuses on the development of the skills that students can now name and describe.

**Table 1 Student Learning Outcomes—Critical Thinking Skills**

- Students will demonstrate knowledge of critical thinking skills.
- Students will develop critical thinking skills.
- Students will apply critical thinking skills in courses that are part of the general education curriculum and as part of their academic majors.

In discussing the role of critical thinking in teaching social studies, Sears and Parsons (1991) note a gap between those who view social studies education as a means to
develop critical thinking skills (an attitude usually taken by theorists at the university level) and those who view it as a way to teach content and socialize students into their culture (the attitude taken by teachers engaged in the practice of teaching in the classroom). To bridge this gap, they suggest that college instructors develop critical thinking not as a strategy, but as an ethic (i.e., a way of living in the world) that they model in their own classes. The third student learning outcome, application of critical thinking skills, requires the infusion of critical thinking across the curriculum and fosters the ethic of critical thinking as a way of living in the world.

Values

The second component of the QEP requires learning about and applying the university core values (See Table 2). Saint Leo University’s core values of excellence, community, respect, personal development, responsible stewardship, and integrity are “communicated and shared across all locations [and our] One University [though it has students, faculty, and staff located around the world] is united by the actions of the students, faculty, and staff that embody those values…” (Blasi, Carter, Adams, & Martin, 2010). These core values form a foundation for all divisions of the university and particularly impact students through academic affairs and student services. They are visibly posted in all of the university’s locations (e.g., on the University Campus they appear on a main wall in the dining hall), one to three values are selected to be emphasized in each course and clearly appear as part of the learning objectives in the course syllabus, and testimonials about individual values are given at the university’s community day events that take place at the beginning of the fall and spring semesters on the University Campus and are broadcast to continuing education centers.

The QEP strengthens students’ awareness and knowledge of the university core values and provides learning experiences in the general education curriculum and the academic majors that engage students in applying the core values to course assignments and then reflecting on the application.

Table 2 Student Learning Outcomes—Valuing

- Students will show knowledge of the university core values and their definitions.
- Students will apply the university core values to discipline-specific situations.

Application

The third component of student learning outcomes is the application of critical thinking and values to decision making. The first student learning outcome in Table 3 is fulfilled when students apply or link critical thinking and core values. The second learning outcome requires students to go beyond application to synthesis. They must describe how critical thinking and the application of specific values supports the decisions they make.

Table 3 Student Learning Outcomes—Application

- Students will link critical thinking with values in decision making.
- Students will articulate a rationale for and defend decisions made using a critical thinking, values-based model.
A Model for a Challenging World uses the collegiate experiences of Saint Leo University students at all locations to strengthen students’ skills in learning about and applying critical thinking and core values to decision making.
Development of the Saint Leo University QEP progressed through a sequentially sound series of meetings, discussions, surveys, and face-to-face interviews. Over the past three years the topic evolved from an early focus on the university core values to values-based learning, to critical thinking and choices. During the past six months, Saint Leo University’s QEP emerged from community conversations in the continuing education centers with faculty, staff, and students. To ensure university-wide engagement in the QEP, the final round of focus groups began in the continuing education centers—where the majority of Saint Leo University students take classes. The QEP topic was further refined through subsequent conversations with students and faculty on the University Campus.

2008 Meetings with Faculty, Staff, and Student Government President

In early discussions, the university core values surfaced as a favored QEP topic. Stakeholders expressed the greatest interest in developing ways students would learn to use the values when making decisions. As one committee member wrote, “This will help us demonstrate that the core values are integral to the Saint Leo experience, values are not just hung on the wall.” Some voiced concerns that for some members of the university community, the core values are defining aspects of how they approach their studies and their work; however, for others they do not inform their actions or decisions.

Although the explicit focus was on the core values, early feedback from committee members about the changes that faculty will see in students implicitly included a critical thinking component. For example, one committee member wrote, “I think faculty will see students who are able to explain/rationalize their assertions because students will begin to see that they use more than opinion in decisions and will develop the skills to articulate the basis for their thoughts.”

In the spring of 2008, participants began to talk about making the values a daily reality. They were asked to describe what they would hear students say when the core values were a daily reality. Two responses capture the combination of values and critical thinking. The first is:

> The QEP has helped me see that how I think about and act upon situations is shaped by what I value. It has helped me to clarify for myself the values that are most important to me. What I like is that this QEP was not an indoctrination program in which I was expected to accept blindly the core values as the Ultimate Values. If anything, the QEP helped me to begin to challenge some assumptions that I had and to ask myself, “what is truly important.”

The second response states:

> In the business class on ethics, we discussed the “need” of corporations to lay-off workers and alternative ways of framing the problem and the choices. I did not come away with a good solution to the problems that corporations face—but I did come away with a clear sense that “laying people off” is not an easy nor necessarily right decision.
These two quotes illustrate a dual focus on both values and the use of critical thinking skills.

During this period, participants raised two concerns. The first concern focused on the importance of developing sustainable ways to answer the question: how have students developed, learned, and benefited? The second concern was in developing an approach for faculty involvement that would make the QEP an initiative for which faculty members had protected time instead of it becoming one more among many priorities.

December 2009: Workshop for Alumni of Leadership Saint Leo

Leadership Saint Leo is a year-long leadership development program for administrators, staff, and faculty that is now in its seventh year. The QEP Faculty Fellows Program (see Organization Resources, page 52) is modeled on the Leadership Saint Leo program. Leadership Saint Leo alumni meet periodically for continued professional development and to learn about emerging issues in higher education. Trish Parrish and Jeffrey Anderson facilitated an alumni workshop. The workshop, From complying to defining: Leaders’ role in reaffirmation, prepared alumni to productively participate in reaffirmation and QEP concept development. At this point, Saint Leo University’s concept for the QEP was values-based learning. Participants described the importance of students applying values-based decision making to their personal and professional lives. They also identified learning experiences that would help students make core values an integral part of their decision making.

January 2010: QEP Becomes a Key Result Area for Saint Leo University

As a result of the December 2009 university strategic planning meeting, Reaffirmation of Accreditation and the Quality Enhancement Plan became a Key Result Area (KRA). The KRAs are strategically important issues that receive university-wide attention and special funding. The president and the vice presidents appoint the people who serve on the KRA teams. Faculty and staff from across the university were assigned to work on the development of the QEP, becoming the initial QEP advisory committee.

In spring 2010, four members of the KRA team wrote a QEP idea paper titled, Six Core Values: One University. The introduction to the paper summarizes its purpose.

The dispersed nature of the university calls out for a unifying narrative. Despite the diverse locations, a narrative does emerge: Saint Leo University’s core values are communicated and shared across all locations. Saint Leo University, then, is united by the actions of the students, faculty, and staff that embody those values. We attempt to outline what is being done in relation to the core values with the purpose of informing the development of our Quality Enhancement Plan.

Cece Martin, one of the co-authors, researched the components of nationally recognized values-centered student programs that can inform our QEP. In this way we can take what we have learned from on-campus surveys and interviews and also bring in an outside perspective by learning what other institutions are doing in relation to offering a core-values education. …These programs were identified for their innovative program offerings, while also showing a diversity of models. Some of these programs were cited in Colleges that Encourage
The paper provided useful background information for the KRA team about what was already taking place at Saint Leo University with respect to the core values and what other universities with programs on values were doing. After reviewing literature and exploring possible ways to develop the Saint Leo University QEP around values, two themes emerged: values-based decision making and values-based choices.

In June 2010, members of the KRA team responded to several open-ended questions to indicate preferences for values-based choices or values-based decision making and to begin to describe the effect that the QEP could have on students. On June 16, Jeffrey Anderson and Marilyn Mallue met and reviewed the KRA team responses to the survey about defining the QEP. They compared and contrasted the responses of those who favored viewing the QEP as a decision making process, those who viewed it as making choices, and those who were comfortable with either approach.

More team members favored values-based decision making. The analysis of comments supported the conclusion that those who favored the decision making approach saw values as part of an intentional decision process in all aspects of student’s lives (i.e., both in and outside of the academic classroom/course framework). This view implies that helping students to intentionally apply values to critical thinking is an approach to decision making. Thus, learning to use the core values can be seen as a shaping process in which students are taught to stop and think about applying the values to specific situations in their lives.

Whether respondents favored values-based choices or values-based decision making, the written comments indicated an expectation that the core values should be evident in learning outcomes in a way that transforms students’ lives and in ways that extend beyond current practices.

AUGUST 2010: SURVEY ALL FACULTY AND STAFF

At the beginning of the 2010-2011 academic year, the KRA team surveyed all faculty, both full-time and adjuncts, and staff. Responses to this survey surfaced an interest in two related areas: critical thinking and civic engagement.

FALL 2010: REFINING THE QEP.

In early fall, meetings, focus groups, and lunch conversations were conducted at the university’s continuing education centers in Virginia, Georgia, and Florida. The meetings included Saint Leo University students, faculty, staff, and administrators in the continuing education centers. Building on the work of the KRA team, the early focus groups explored developing a QEP around the university’s core values. Five questions guided the initial focus groups:

1. Where (in what ways) do the core values connect with students?
2. What about this would appeal to prospective students?
3. If current or prospective students were to ask “How does this benefit me?” what are one or two things you would say?
4. To have real value for your students, what needs to be built into the QEP?
5. What are some things that have made major initiatives go well in the past at Saint Leo University?

Early focus group participants talked about ways in which the university core values are a defining aspect of what it means to be a member of the Saint Leo University community. The participants also emphasized the importance of helping students develop critical thinking skills through their study at Saint Leo University. Critical thinking had also emerged in the August survey of faculty and staff.

Midway through the focus groups, a third topic surfaced: students’ decisions, actions, and service to the community. Examples of services that students provide to the community were mentioned as evidence that critical thinking and core values are being applied. At this point, the topic expanded from critical thinking and core values to include community service or civic engagement. At a dinner meeting in Virginia, faculty members explored possible linkages between the school’s mission statement and these three elements.

Further discussions with faculty and staff in the Florida continuing education centers and with faculty and students at the University Campus narrowed the QEP topic to developing critical thinking skills and values to improve how students make decisions. Although civic engagement and service to the community are seen as important, the decision was made to focus on strengthening the foundations of critical thinking and core values through this Quality Enhancement Plan. Doing this well was determined to be the priority.

The face-to-face conversations helped surface additional ideas about what the Saint Leo University QEP needs to accomplish. Discussions also emphasized the importance of narrowing the focus to a topic that is important and doable, and they began to build the consensus and support needed for successful and sustained implementation. Following his participation in a focus group, a faculty member wrote:

I really enjoyed the session this evening and felt that the open-forum meeting helped many of us who came in with differing perspectives establish a common consensus about the QEP Program. I think the critical consensus occurred when each of us realized and accepted the importance and viability of the program while unilaterally acknowledging the difficulties of effectively establishing, implementing, and monitoring a successful QEP Program. … Let me know if I can help you in any way in this endeavor. (B. Lowder, personal correspondence, October 10, 2010)

At the October Board of Trustees retreat, Jeffrey Anderson, associate vice president for Academic Affairs and Carol Walker, dean of the School of Education and Social Services, presented the QEP topic “A Model for a Challenging World.” Board members learned about the development process that had taken place and affirmed the appropriateness of the QEP topic for the university.
The Importance of Critical Thinking as a Component of the QEP

In addition to a concern raised in the QEP focus groups, critical thinking had become a priority for Mary Spoto, the dean of the School of Arts and Sciences. She noted that among the three skill areas (mathematics, writing, and reading/critical thinking) tested by Educational Testing Service’s (ETS) Measure of Academic Proficiency and Progress,¹ the incoming fall 2009 first time in college (FTIC) students scored lowest in critical thinking. Ninety-two percent scored “not proficient” in critical thinking. According to ETS, the critical thinking items test the student’s ability to evaluate hypotheses for consistency, determine the relevance of information, and recognize flaws and inconsistencies in arguments.

In March 2010, Dr. Spoto surveyed faculty members teaching general education courses to learn about the activities, exercises, and assignments they use to improve students’ writing and critical thinking. The survey also asked the instructors of general education courses to describe their most successful technique for helping students improve their critical thinking. Faculty members described a greater number of ways for improving student writing than they did for improving critical thinking. A few faculty members provided examples of specific activities and how those activities improved critical thinking. Many provided more general answers, such as, “active learning exercises,” “explicitly uncovering assumptions,” and “students are at their most critical when we discuss topics relevant to them based on the reading assignments…their insights often appear in their own writing.”

Table 4 Distribution of Critical Thinking Scores for Incoming Freshmen

<table>
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<tr>
<th>Year Tested</th>
<th>Proficient</th>
<th>Marginal</th>
<th>Not Proficient</th>
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<tr>
<td>2009¹ (n=440)</td>
<td>2%</td>
<td>6%</td>
<td>92%</td>
</tr>
<tr>
<td>2010² (n=468)</td>
<td>1%</td>
<td>10%</td>
<td>88%</td>
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¹Measure of Academic Proficiency and Progress; ²ETS ® Proficiency Profile

Due to rounding, rows may not sum to 100%

As shown in Table 4, the ETS test results from fall 2009 pointed to the need to improve critical thinking skills. Testing of the 2010 incoming class further substantiated that need. Eight-eight percent scored “not proficient” on critical thinking. These results are for the incoming, first time in college cohort only. The fall 2010 conversations and focus groups with teaching faculty in the continuing education centers substantiated the importance of improving the critical thinking skills among students in continuing education.

During the fall 2010 focus groups, University Campus faculty members raised two concerns about adding the objective “improve critical thinking” to their courses: lack of time and lack of clarity about what it means. The focus group participants were clear that the answer to improving critical thinking is not to decrease the content covered in the course; however, they were unclear about how to cover the required material and make

¹ In 2010, Educational Testing Service rebranded the MAPP (Measure of Academic Proficiency and Progress) as the ETS® Proficiency Profile.
significant improvements in critical thinking. Several also talked about the need for a shared definition of critical thinking. One suggestion that emerged from the focus groups was to have more round-table discussions and open-forum meetings about how to teach in ways that substantially improve critical thinking without sacrificing content.
CRITICAL THINKING

This section of the literature review focuses on defining the term critical thinking (with a focus on the inherent connection between critical thinking and decision making), the challenges to teaching critical thinking, and effective practices for teaching critical thinking. Finally, suggested components of a successful professional development program such as proposed in the Saint Leo University QEP are given.

DEFINITION

While institutions of higher education often cite the development of critical thinking in students to be a crucial goal, there is little agreement on what critical thinking actually is. One reason for this difficulty in creating a common definition comes from the lack of communication between the two disciplines most concerned with its study: philosophy and cognitive psychology (Morgan, 1995, as cited in Dike, Kochan, Reed, & Ross, 2006). Philosophy offers the American Philosophical Association Expert Consensus Definition developed by a panel of experts using the Delphi method:

We understand critical thinking to be purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or contextual considerations upon which that judgment is based. …The ideal critical thinker is habitually inquisitive, well-informed, trustful of reason, open-minded, flexible, fair-minded in evaluation, honest in facing personal biases, prudent in making judgments, willing to reconsider, clear about issues, orderly in complex matters, diligent in seeking relevant information reasonable in the selection of criteria, focused in inquiry, and persistent in seeking results which are as precise as the subject and the circumstances of inquiry permit. (Falcione, 1990, p. 3)

The American Psychological Association, on the other hand, defines critical thinking as “a form of directed, problem-focused thinking in which the individual tests ideas or possible solutions for errors or drawbacks. It is essential to such activities as examining the validity of a hypothesis or interpreting the meaning of research results” (VandenBos, 2007, p. 244). Additionally, Glaser’s seminal work (as cited in Lloyd & Bahr, 2010) focused on three distinct characteristics of critical thinking:

- an attitude of being or state of mind to thoughtfully consider the problems and subjects that come within a range of one’s experiences;
- knowledge of the methods of logical enquiry and reasoning; and
- some skill in applying those methods. (p. 1)

While it may be noted that no one definition of critical thinking is universally accepted, a number of definitions support the QEP’s emphasis on linking critical thinking and decision making by incorporating such ideas as problem solving or guiding behavior or action. Angelo (1995), for instance, reported that “Most formal definitions characterize critical thinking as the intentional application of rational, higher order thinking skills, such as analysis, synthesis, problem recognition and problem solving, inference, and
evaluation” (p. 6). Scriven and Paul (1987) defined critical thinking as “the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action” (¶1) and they further noted that “critical thinking can be seen as having two components: 1) a set of information and belief generating and processing skills, and 2) the habit, based on intellectual commitment, of using those skills to guide behavior” (¶3). Brookfield (n.d.) defines critical thinking in terms of its four functions of identifying one’s assumptions, checking their accuracy and validity, viewing ideas and actions from alternate perspectives, and taking informed action. Additionally, the Center for Critical Thinking defines critical thinking in the following way:

the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action. (2004, ¶2)

Although there are many definitions of critical thinking, they all describe skills that can be taught and learned. They also assume that when students learn and use the skills, they become better thinkers (Halpern, 1999). She notes that critical thinking “is also an attitude or disposition to recognize when a skill is needed and the willingness to exert the mental effort needed to apply it” (p. 72). Thus, students must learn more than just the technical thinking skills involved in critical thinking, but must learn to “value good thinking and the work that is needed to achieve that goal” (p. 72).

The Saint Leo University QEP employs Halpern’s cognitively-based definition of critical thinking as “the use of those cognitive skills or strategies that increase the probability of a desirable outcome... (where ‘desirable’ is defined by the individual, such as making good career choices or wise financial investments)” (1998, p. 450). She continues by describing several aspects of what constitutes critical thinking:

Critical thinking is purposeful, reasoned, and goal-directed. It is the kind of thinking involved in solving problems, formulating inferences, calculating likelihoods, and making decisions. Critical thinkers use these skills appropriately, without prompting, and usually with conscious intent in a variety of settings. That is, they are predisposed to think critically. When people think critically, they are evaluating the outcomes of their thought processes—how good a decision is or how well a problem is solved. …Critical thinking also involves evaluating the thinking process—the reasoning that went into the conclusion one arrived at or the kinds of factors considered in making a decision. (p. 450-451)

Some contemporary education philosophers challenge what critical thinking may encompass.

Many writers on critical thinking have moved beyond the conceptualization of critical thinking as the use of logic and argumentation. Thayer-Bacon (2001) suggests that critical thinking should be transformed into “constructive thinking in relation to the practice of thinking constructively within social communities” (p. 2). This puts an
emphasis on caring and takes into consideration ways of knowing such as intuition, imagination, and emotions. She notes that “teachers of critical thinking worry that their students have embraced the value of thinking critically, but are unable to connect their knowledge to their actions, and apply their critical thinking skills in their lives” (Thayer-Bacon, p. 1).

Phelan (2001) suggests that “practical wisdom” can be an alternative to critical thinking. Her idea is that critical thinking requires an ethical responsiveness in order to enable responses to “the ill-structured problems that emerge from life as lived” (p. 42).

The Saint Leo University QEP is built on the assumption that critical thinking alone is not sufficient. Through A Model for a Challenging World, students learn to apply critical thinking and core values to decision making. The intent is to prepare students to respond to what Phelan describes as “the ill-structured problems that emerge from life as lived.”

**CHALLENGE**

There are numerous challenges to teaching critical thinking. Five challenges identified in the literature must be addressed in this QEP:

- Balancing content coverage with development of critical thinking
- Determining whether stand alone courses on critical thinking skills are needed
- Helping students learn to question their own beliefs and to explore ways of knowing that differ from how they typically approach issues
- Developing an understanding of critical thinking that is shared by students and faculty members
- Developing expertise in critical thinking and teaching critical thinking among the faculty members

**BALANCING**

One challenge faculty members face is their own conflict between their commitment to teaching critical thinking skills and perceptions of the time it would take to teach them. Choy and Cheah (2009) found that teachers felt conflict between “wanting to stimulate critical thinking in their students and needing to complete the stipulated requirements of the course” (p. 205). Focus groups at Saint Leo University confirmed the faculty’s commitment to teaching knowledge and their concerns about teaching critical thinking skills in addition. For the QEP to be successful, faculty in all teaching venues will need to learn to teach their discipline’s knowledge base while also developing their students’ use of critical thinking skills. As Tsui (2002) points out, altering commonplace teaching techniques is more successful than replacing them with drastically different methods.

**STAND-ALONE COURSES**

The literature provides champions of stand-alone critical thinking courses and champions of discipline-specific courses infused with critical thinking. There are also advocates for curriculum with a combination of stand alone courses reinforced by discipline-specific courses. For example, van Gelder (1997) discusses factors that affect the development of critical thinking skills. He views the learning of basic theory and
vocabulary as fundamental. He concludes that “critical thinking must be studied and practiced in its own right; it must be an explicit part of the curriculum” (van Gelder, p. 3) and that increasing students’ ability to think critically takes time and effort.

In a qualitative case study done at a southern private liberal arts university, Halx and Reybold (2005) interviewed a small set of faculty at a private liberal arts university who had “demonstrated a clear understanding of critical thinking as well as a significant ability to develop such thinking in their students” (p. 298). They noted that, in spite of a body of literature which suggests that “content and thinking go hand in hand” (p. 310), faculty in their study did not agree on the role of content in teaching critical thinking.

LEARNING TO QUESTION

Developing critical thinking skills results in questioning personal beliefs, and this presents a challenge for many learners. Another challenge is that becoming a critical thinker requires developing of new ways of thinking and knowing and abandoning methods that have long been used (Halpern 1998). In addition to the admonishment that this takes time, specific teaching methods that decrease the inherent threat of these changes will increase the likelihood of success.

AGREEING ON WHAT CRITICAL THINKING IS

This literature review opened with the observation that there are many definitions of critical thinking. In a qualitative study that surveyed professional military educators about their perceptions of the concept of critical thinking, Dike, Kochan, Reed, and Ross (2006) found that the educators did not share a common definition of critical thinking. The researchers concluded that a common definition of critical thinking needed to be developed so that it could be valued, taught, modeled, and assessed. A shared definition of critical thinking among faculty members is hailed by several researchers as necessary; however, reaching agreement is not necessarily easy.

Research indicates that faculty and students have different understandings and expectations about critical thinking. In comparing characteristics of academic and student definitions of critical thinking, Lloyd and Bahr (2010) found that faculty were more likely to define critical thinking as a state of mind (or disposition) or as techniques and processes, while students were more likely to define it in terms of the ability to critique (or the application of critical thinking to learning). Such a disconnect points out the necessity for faculty to explicitly model and verbalize what they are trying to teach about critical thinking.

DEVELOPING EXPERTISE

In their 2005 study, Halx and Reybold noted that “this issue of nonpreparation [on the part of faculty]…calls into question the centrality of critical thinking to the undergraduate curriculum” (p. 310). In focus groups with faculty members at Saint Leo University, several raised concerns about their lack of formal preparation in teaching critical thinking.
BALANCING CONTENT WITH DEVELOPMENT OF CRITICAL THINKING

As Mandernach (2006) points out, the definitions of critical thinking generally allow faculty to strike a balance “between the content of a course and the process by which the content is mastered” (p. 42). Learning objectives for a course define the content while critical thinking guidelines define the instructional strategies for teaching and learning the content. This is an important distinction in a faculty development program such as planned for the Saint Leo University QEP.

Mandernach (2006) points out some of the barriers to teaching critical thinking that are found in the traditional classroom (e.g., limited amount of contact time and the need to address a large number of diverse students as a group) and then offers a number of online instructional strategies to help overcome these barriers. She embraces the constructivist (i.e., student-centered) instructional philosophies which shift the emphasis from the instructor to the student.

Suggestions for expanding available class time include online preparation quizzes and online lectures or supplements which guide students’ focus and attention to key concepts. The asynchronous learning environment created by online education also provides “educators with the means to offer instructional assistance and learning activities that meet the demands, pace and interest of individual students” (p. 45).

DETERMINING WHETHER STAND ALONE COURSES ON CRITICAL THINKING SKILLS ARE NEEDED

Moore (2004) discusses “a central pedagogical question: is it best for our undergraduate students to be taught about critical thinking as a subject of study in itself, or should it be handled within the context of student’s study in the disciplines?” (p. 4). In his linguistic comparison of three texts, he clearly sides with John McPeck’s position “that the development of students’ critical abilities should always be pursued within the context of their study within the disciplines” (McPeck as cited in Moore, 2004, p. 5-6). As Saint Leo University faculty considers adding a specific course in critical thinking, doing so would seem, as a practical matter, to be a challenge. Yet, accepting Moore’s argument that critical thinking should be taught within the disciplines would also be seen as challenging. As faculty commonly protest, it is difficult enough to teach the required content in their courses without having to also teach critical thinking skills. One goal of the QEP would be for faculty to explore ways to teach critical thinking while incorporating it in their regular coursework. Another issue is the role of library instruction in connection with the development of critical thinking as reviewed by Ellis and Whatley (2008). One of the themes they discovered in providing an annotated bibliography and review of selected programs in this area was “the importance of subject and course integration in the teaching of critical thinking skills in libraries” (p. 5).

The Saint Leo University QEP will be a hybrid approach. General education (foundation) courses will include activities, assignments, and assessments that develop critical thinking skills. The use of these skills will be reinforced and expanded in discipline specific courses designed by the QEP faculty fellows.
HELPING STUDENTS LEARN TO QUESTION THEIR OWN BELIEFS AND EXPLORE WAYS OF KNOWING THAT DIFFER FROM HOW THEY TYPICALLY APPROACH ISSUES

The literature addresses the difficulty of making the changes inherent in becoming a critical thinker, others have identified specific ways to mitigate resistance and still others have researched the developmental and cognitive aspects.

Saint Leo University serves a student body of both traditional age and older adult students. Labouvie-Vief (2006) has noted that the current conceptualization of thought and being involves “the processes of thinking that deal with the uncertain and changing nature of knowledge, the acknowledgement of diversity, and the importance of nonrational (e.g., automatic and affective) processes in decision making” (p. 59). She also notes that research within the area of cognitive-developmental psychology has identified a stage of development labeled emerging adulthood, which is a time of “disequilibration of...thinking that can lead to a significant expansion of thinking,” though it is important to recognize that this is a “critical stage in which these thought structures get launched but are not necessarily brought to fruition” (p. 60).

Labouvie-Vief (2006) points out:

In sum, there is ample evidence that the period of emerging adulthood, from about the age of 18 to around 30, is a significant time for the development of mature thought structures. These thought structures appear to permeate many dimensions of individuals’ lives. They permit them to project self into the future and into complex roles and communal activities and to participate creatively in many activities of adult life. At the same time, research indicates that this period appears to mark the emergence of these structures rather than their culmination, and that only a portion of individuals may come to master them. ...again and again, studies demonstrate that whether or not individuals begin to evolve more mature forms of thinking in emerging adulthood is strongly dependent on education. (p. 71)

Labouvie-Vief (2006) also points out that there are variations in cognitive growth and a dynamic approach to the understanding of cognition allows the individual to be seen not as progressing through a series of age- or life-period-correlated stages, but rather as possessing a web of levels within the many domains of life. An individual, then, may exhibit different levels of thinking complexity across different domains and within each domain may also exhibit different levels of complexity depending on “whether certain supporting conditions are available” (p. 72). For instance, individuals aged 14 to 28 were asked to engage in a reflective judgment task (Kitchener, Lynch, Fischer, and Wood, 1993) in which they read a statement prototypical of each level and then summarized the statements in their own words. Half of them performed in response to standard instructions while the other half performed under conditions of high support. These individuals read the statements and then were asked a series of questions which highlighted basic concepts and drew their attention to critical aspects of them. The results of the study showed that at each age those performing under conditions of high support evidenced higher levels of thinking than those performing under the standard conditions. In support of the development which occurs in the period of emerging adulthood, higher level “responses appeared to spurt at about the age of 20, when about
50 percent of responses were scored at this level; another spurt at about age 25 raised the percentage to nearly 100" (Labouvie-Vief, 2006, p. 73).

Labouvie-Vief (2006) concludes that “younger generations are not just knowledge builders but also are novices mentored by more skilled knowers. Thus, their continued development depends on the presence of an informational differential or gradient provided by more mature generations” (p. 74). Thus, faculty is an important component in student learning.

There is an emotional component to higher order thinking as well. Labouvie-Vief (2006) points out that:

[A] compensatory and curvilinear relationship between an individual’s level of emotional activation or arousal and the degree to which complex, integrated behavior is possible. Slight elevations of activation foster integrated well-ordered thinking and behavior. However, when activation rises to extremely high levels, it tends to disrupt or degrade integration. At high levels of activation, automated nonconscious thoughts and behaviors, which are less easily disrupted by high arousal or activation, take over in an effort to maintain affect in a sufficiently positive range. (p. 76)

The example she gives involves the nation’s reaction to the terrorist attacks on September 11, 2001. “The reactions to these attacks involved not only an increase in patriotic feelings and emphasis on family values but also increases in racial and ethnic stereotyping” (p. 76). In further discussing the relation of conceptional complexity and emotions, Labouvie-Vief presents a table showing a number of regulation styles of emotion and their distribution among different age intervals.

Pre-adolescents, for instance, are predominantly in the self-protective group. Emerging adults show a dramatic increase in the number classified as evidencing the complex regulation style, while adults show a correspondingly dramatic increase in those classified as evidencing the integrated regulation style. Labouvie-Vief concludes by stating that “emerging adulthood can be seen as a period critical for the establishment of mature structures of thinking, yet also vulnerable to stabilizing distortive forms of thinking if important familial and cultural supports are not available” (p. 80).

In discussing the assessment of thinking in adult learners, Crone-Todd (2007) points out the importance of support for students as they move from one level of complexity of thinking to the next. Brookfield also calls for a developmental approach to teaching critical thinking. He suggests that faculty must get students “used to looking at assumptions and ideas from different perspectives around materials that are not that personally connected to the student, and then gradually, over time, you focus in more and more on the students’ own ideas and habits of thinking” (Johanson, 2010, p. 27).

Further evidence for the support faculty must give to students is found in a study conducted by Goldberg and Coufal (2009) in which critical thinking skills were measured (using qualitative and quantitative data) after students completed a service-learning project. The hypothesis was that improved critical thinking would contribute to cultural competence in a group of students studying communication disorders. They found that
students’ critical thinking development was non-linear and involved perplexity. Thus, they suggest that students will go through a process of learning, unlearning, and relearning and that they will need the support of faculty who are able to address both reason and emotion as their students go through this transformation.

**HOW TO TEACH**

Visser, Visser, and Schlosser (2003) point out that there are different challenges and opportunities that can be seen when comparing traditional education to distance education. They see limitations for distance education including limited opportunities for creativity; limited opportunities for decision-making (in the sense of lock-step programs with few, if any, electives); little emphasis on reasoning because assessment is focused on acquisition of specific outcome skills and knowledge; the impact of language (in the sense of a lack of attention to specific communication skills needed for this type of education); and a lack of focus on meta-cognition (learning to learn). On the other hand, opportunities for the support of critical thinking in distance education include the fact that distance learning is in some ways more open to collaborative problem solving to promote critical thinking than traditional classrooms This is in part due to the fact that all students are encouraged to respond to discussion boards and may do so without having to feel the pressure of 50 minute class periods and the necessity to give immediate responses to fellow students. In addition, communication and collaboration can be directed to the instructor, particular students, or all fellow students. Indeed, the preparation, interaction, evaluation (PIE) model used for online courses at Saint Leo University allows just such interaction of student with instructor, student with other students, and student with self in the interaction segments of each course (Nastanski & Colaric, 2008). In addition, Visser, Visser and Schlosser (2003) point out that distance learning students may have at their disposal both physical resources and Internet resources when they collaborate in ways not available in a traditional classroom.

Visser, Visser and Schlosser (2003) also point out what they consider one of the great strengths of the distance learning classroom:

Students in traditional classroom-based learning environments may come from a variety of social and learning backgrounds in terms of their social culture and their learning culture. However, they exercise and develop their academic growth within a fairly fixed community, operating within the culture and values prescribed by the institution. This differs significantly from distance learning environments, in which learners continue to operate within their own social and cultural contexts and, thus, more readily integrate this familiar context within a distance learning environment. It is therefore likely that critical discourse and thought in such distance learning contexts is fundamentally different in nature from classroom-based contexts. (p. 405-406)

The distance learners are involved in the professional and social context of their diverse local communities and contribute real world experiences in a way traditional students often cannot. This increases the opportunities “for the class as a whole to negotiate the complexity and ambiguity of the world” and “for careful reflection on the role of critical thought and discourse in interacting with this complexity and ambiguity” (Visser, Visser, & Schlosser, p. 406).
BEST PRACTICES

In discussing critical thinking in distance education and traditional education, Visser, Visser, and Schlosser (2003) point out that in one California study of public and private universities researchers found that faculty members were overconfident in their understanding of critical thinking. For instance, “while almost 90% of the instructors claimed that critical thinking was the primary objective of their instruction, only 19% of the instructors could give a clear explanation of critical thinking” (p. 402) and few could demonstrate that they clearly understood basic concepts of critical thinking. Evidence that critical thinking is not being learned by students can be found in a recent study using the Collegiate Learning Assessment (a test of analytic reasoning, critical thinking, and written communication skills) which found that “forty-five percent of students made no gains on the CLA during their first two years in college. Thirty-six percent made no gains over the entire four years” (Carey, 2011, p. A64). Other faculty factors that affect the integration of critical thinking in higher education include the fact that faculty need opportunities to learn basic knowledge about critical thinking and to learn how to model it in their classes. The Saint Leo University QEP will provide the faculty development needed to address these issues for both full-time and adjunct faculty.

An annotated bibliography of the materials available in one academic library on the subject of teaching critical thinking skills in higher education suggests the importance of instructor skills for providing the supportive learning environment, knowledge of developmental levels of instruction, and techniques needed for teaching critical thinking common for a number of academic disciplines (Shriner, 2006).

Language and speech are important in the western cultural context as the way in which one “expresses and clarifies one’s thoughts, as seen in examples such as the use of Socratic methods in teaching” (Kim, 2010, ¶ 4) and training in the foundations of critical thinking would provide faculty and students with new vocabulary which would enable them to communicate in many helpful ways. An example is given by Conner (2008) when he identified two important questions that college students often ask: What do I do with the rest of my life? and What does this ‘higher education’ have to do with my life? He suggests that “students of the traditional college-going age usually have a very limited vocabulary with which to think about such questions. By ‘vocabulary’ I mean not only words but metaphors, images, logical structures, models, and exempla” (p. 6).

Choy and Cheah (2009) found that teachers perceive they are teaching critical thinking skills, but they took as evidence of this the students’ ability to explain concepts in their own words. “This seems to imply that teachers themselves may not have a strong understanding of critical thinking and how to encourage students to think in this way” (p. 205). Black (as cited in Goldberg & Coufal, 2009) “suggested that a climate of high expectations and teacher warmth that encouraged students to express their thoughts needed to be present to ensure success of critical thinking in the classroom” (Goldberg & Coufal, 2009). While their study was conducted in Malaysia, the authors present their results as possibly relevant to other populations.

Sears and Parsons (1991) in discussing the issue of critical thinking in teaching social studies note a gap between those who view social studies education as a means to
develop critical thinking skills (an attitude usually taken by theorists at the university level) and those who view it as a way to teach content and socialize students into their culture (the attitude taken by teachers engaged in the practice of teaching in the classroom). To bridge this gap, they suggest that college instructors develop critical thinking not as a strategy, but as an ethic (i.e., a way of living in the world) that they model in their own classes and they identify seven principles for an ethic of critical thinking, noting that critical thinking requires:

- the attitude that knowledge is not fixed but always subject to reexamination and change;
- the attitude that there is no question which cannot, or should not, be asked;
- an awareness of, and an empathy for, alternative world views;
- a tolerance for ambiguity;
- an appreciation for alternative ways of knowing;
- a skeptical attitude towards text; and
- a sense of the complexity of human issues.

Burbach, Matkin, and Fritz (2004) found that a course on leadership, taught using journal writing, service learning, and small groups utilizing scenarios, case study, and questioning, resulted in increases in critical thinking skills. Importantly, they concluded that the gains were accomplished not by changing what was taught, but by simply changing how it was taught.

In comparing four institutions using qualitative methods, Tsui (2002) identified two instructional techniques that were "more commonly found at institutions where students report experiencing greater rather than less growth in critical thinking" (p. 755). These two techniques were writing across the curriculum and class discussions. The particular types of writing assignments she identified were first those that demand more analysis (e.g., synthesis of material and evaluation of arguments) as opposed to description. Second, such writing assignments both provided feedback (whether from the instructor, a writing tutor, or peers) and required the rewriting of an assignment. Tsui points out that having a commitment to a writing across the curriculum program such as that at Saint Leo University gives students opportunities to practice critical thinking within a variety of subjects and throughout the several years of their college studies. Tsui also discusses the need for instructors “to skillfully guide discussion and to facilitate student participation” (p. 755) and she presents a number of techniques which instructors may use to accomplish these goals. These include such simple tactics as arranging class seating in a semi-circular pattern, having students address comments to the entire class rather than just to the instructor, encouraging a positive climate in class in by having students get to know one another through cooperative learning tasks, encouraging students to elaborate on their answers, praising contributions, correcting wrong answers, and using students’ names.

Halpern (1998, 1999) proposed a four-part model of critical thinking in which students are given instruction that encompasses critical thinking skills, the dispositions (i.e., the attitudes which lead students to value critical thinking and to want to use it), structure
training (in which “students are taught to create retrieval cues from the structural aspects of a problem or an argument so that when these structural aspects are present in the novel context, they can serve as cues for retrieval” (1999, p. 72) and metacognitive monitoring (in which students are taught to monitor their own thinking processes). Halpern (1998) identifies the five skills needed for critical thinking as (a) verbal reasoning, (b) argument analysis, (c) thinking as hypothesis testing, (d) dealing with likelihood and uncertainty, and (e) decision-making and problem-solving skills (which include creative thinking).

The dispositions which Halpern lists as necessary for critical thinking include:

(a) willingness to engage in and persist at a complex task, (b) habitual use of plans and the suppression of impulsive activity, (c) flexibility or open-mindedness, (d) willingness to abandon nonproductive strategies in an attempt to self-correct, and (e) an awareness of the social realities that need to be overcome (such as the need to seek consensus or compromise) so that thoughts can become actions. (p. 452)

The journal *Teaching of Psychology* devoted an entire issue to the teaching of critical thinking (1995, 22(1)). In the issue, Angleo (1995) noted that a literature review of college teaching and learning “concluded that three teaching approaches can improve students’ critical thinking: student discussion, explicit emphasis on problem solving, and verbalization of metacognitive strategies” (McKeachie, Pintrich, Lin, and Smith, 1986 as cited in Angleo). Angleo suggested that

Critical thinking is likely to improve when teachers (a) provide time for well planned, focused and interactive student discussions that connect prior and subsequent assignments; (b) explicitly teach problem-solving methods and procedures, provide guided practice, and then assess students’ ability to solve problems, and explain how they solve problems; and (c) talk through and model various strategies to direct and control attention and thinking (metacognition), provide practice in these strategies, and then assess students’ self-awareness and use of metacognitive strategies. (p. 6)

Wade (1995), in the same issue of *Teaching of Psychology*, presented a number of examples of assignments building on the definition of critical thinking as “the ability and willingness to assess claims and make objective judgments on the basis of well-supported reasons” (Wade and Travis, 1987 pp. 308-309, as cited in Wade, 1995). This definition takes into account both the dispositions (“willingness”) and the skills (“ability”) needed for critical thinking. The assignments focus on eight activities the definition implies: (a) asking questions and being willing to wonder, (b) defining a problem, (c) examining the evidence, (d) analyzing assumptions and biases, (e) avoiding emotional reasoning, (f) avoiding oversimplification, (g) considering other interpretations, and (h) tolerating uncertainty. These types of assignments, of course, can be applied in other disciplines as well.

Paul and Elder (2003) provide three templates for faculty to use in their courses: (a) How to Analyze the Logic of an Article, Essay, or Chapter; (b) How to Figure Out the Logic of a Textbook; and (c) How to Evaluate an Author’s Reasoning. Other resources can be found at The Critical Thinking Community website ([www.criticalthinking.org](http://www.criticalthinking.org)). These
include recommendations for departmental self-evaluation to allow individual departments to identify the modes of thinking critical to their fields. Throughout, the emphasis is once again on integrating critical thinking into coursework.

The above examples all support faculty development as a means to help faculty understand what critical thinking is so that they can teach it in their courses (by both modeling it and describing what they are doing), provide support to students learning to think critically, and to effectively assess it. But developing a QEP which focuses on developing critical thinking skills in students involves more than just a faculty development program. In presenting a professional development model for colleges and universities that fosters critical thinking, Elder (2004) presents “essential components” of such a program. These include having institutions identify the gap between the ideal college and the actual practices on a specific campus; fostering a critical thinking climate by providing support as faculty learn the foundations of critical thinking and tying assessment of faculty and the institution “to the fostering of critical thinking within and throughout the curriculum” (p. 2); promoting administrative commitment to critical thinking; establishing an advisory team to guide the process; taking a long-term approach; providing ongoing faculty and staff workshops; providing activities and opportunities throughout the year that foster critical thinking; linking critical thinking to assessment, accreditation, and the college mission; funding the program; keeping the focus on a substantive concept of critical thinking; avoiding political problems; being aware of the danger of intellectual arrogance (i.e., the gap between what faculty think they know and what actually occurs in the classroom); and avoiding elitism by being inclusive from the start.

Mason (2007) points out that the different approaches of philosophers (Ennis, Paul, McPeck, Siegel, and Roland-Martin) can be summarized in terms of which of the following each tends to emphasize.

The skills of critical reasoning (such as the ability to assess reasons properly)

- A disposition, in the sense of:
- A critical attitude (skepticism, the tendency to ask probing questions) and the commitment to give expression to this attitude, or
- A moral orientation which motivates critical thinking;
- Substantial knowledge of particular content, whether of:
- Concepts in critical thinking (such as necessary and sufficient conditions), or
- A particular discipline, in which one is then capable of critical thought.
  (Mason, p. 343-344)

Mason reports that Ennis places the emphasis on learning the skills of critical thinking (e.g., observing, inferring, and generalizing) and thus his approach “is deductive: it involves applying the principles and skills of critical thought to a particular discipline” (Mason, 2007, p. 341). Paul also emphasizes the skills of critical thinking. He distinguishes, however, between critical thinking in the “weak sense” which is “the ability to think critically about positions other than one’s own” and critical thinking in the “strong
sense” which is “the ability to think critically about one’s own position, arguments, assumptions, and world-view as well” (Mason, p. 341). This deeper level of critical thinking requires the intellectual courage and humility to develop knowledge of oneself. McPeck, on the other hand, “argues that critical thinking is specific to a particular discipline, and that it depends on a thorough knowledge and understanding of the content and epistemology of the discipline” (Mason, p. 341). Thus, for McPeck, “the process of critical thinking is inductive: it involves inducing the principles of critical thought by generalization from the content and structure of the discipline” (Mason, p.342). Siegel emphasizes both the skills and the dispositional domain of critical thinking. In the skills domain he refers to a “reason assessment component” which requires the thinker to possess both subject-specific and subject-neutral (or logical) reasoning skills. In addition, he suggests that a critical thinker must also possess a “critical attitude component” which is manifested by “a love of reason and a commitment to give expression to the principles and skills of critical reasoning” (Mason, p. 343). Mason proposes an integrated conception of critical thinking which encompasses “all five of these components: critical reasoning; a critical attitude; a moral orientation; knowledge of the concepts of critical reason; and knowledge of a particular discipline” (p. 344).

Haas and Keeley (1998) note that “successfully changing one’s teaching emphasis is a complex task, and its consequences are uncertain; in fact, in the short term, they may be negative” (p. 73). Just as when dealing with students who are learning new skills, they suggest that faculty need support while learning to incorporate critical thinking into their teaching. They suggest that such support should encompass a number of strategies. One such strategy involves creating a positive context for change and building a helping alliance by having faculty meet and discuss specific issues about teaching critical thinking. A second strategy involves communicating expertise and credibility by having individuals accept leadership roles in working with other faculty. Creating a sense of safety and trust in voluntary discussion groups is also an important aspect of supporting faculty who are making a change in their teaching. There must also be external incentives to support change such as making departmental objectives clear and making changes in the faculty evaluation process in order to include faculty efforts to engage students in critical thinking. Finally, the authors suggest that “faculty need to be convinced of their ability to develop a critical thinking emphasis and of the benefits of doing so” (p. 69).

The above examples all support faculty development as a means to help faculty understand what critical thinking is so they can teach it in their courses, provide support to students learning to think critically, and to effectively assess it. But developing a QEP which focuses on developing critical thinking skills in students involves more than just a faculty development program. In presenting a professional development model for colleges and universities that fosters critical thinking, Elder (2004) presents “essential components” of such a program. These include:

- having institutions identify the gap between the ideal college and the actual practices on a specific campus;
fostering a critical thinking climate by providing support as faculty learn the foundations of critical thinking and tying assessment of faculty and the institution “to the fostering of critical thinking within and throughout the curriculum” (p. 2);

- promoting administrative commitment to critical thinking; establishing an advisory team to guide the process;
- taking a long-term approach; providing ongoing faculty and staff workshops;
- providing activities and opportunities throughout the year that foster critical thinking;
- linking critical thinking to assessment, accreditation, and the college mission;
- funding the program;
- keeping the focus on a substantive concept of critical thinking;
- avoiding political problems;
- being aware of the danger of intellectual arrogance (i.e., the gap between what faculty think they know and what actually occurs in the classroom); and
- avoiding elitism by being inclusive from the start.

The Saint Leo University QEP has the following critical thinking learning objectives for students:

- Students will demonstrate knowledge of critical thinking skills.
- Students will develop critical thinking skills.
- Students will apply critical thinking skills in their courses.

This review of the literature on critical thinking suggests that in order to accomplish these goals, faculty need faculty development support to learn to integrate critical thinking concepts into their teaching of course content. This training should include:

- learning the foundational vocabulary and language of critical thinking and adopting a common definition of critical thinking as applied within their disciplines,
- learning to model and vocalize critical thinking for students, and
- providing course assignments meant to give practice in critical thinking.

Values

The second component of Saint Leo University’s QEP entails values education, as our goal is to help students learn to incorporate values in their decision making. Saint Leo’s core values of excellence, community, respect, personal development, responsible stewardship, and integrity are “communicated and shared across all locations [and our] One University [though it has students, faculty, and staff located around the world] is united by the actions of the students, faculty, and staff that embody those values” (Blasi, Carter, Adams, & Martin, 2010). It is these core values that form a foundation for the academic affairs, student services, and operations sides of the university. They are visibly posted in all of the university’s locations (e.g., on the University Campus they appear on a main wall in the dining hall), one to three values are selected to be emphasized in each course and clearly appear as part of the learning objectives in the course syllabus, and testimonials about individual values are given at the university’s
Community Day events which take place at the beginning of the fall and spring semesters on the University Campus and are broadcast to continuing education centers.

As reported by Nichols (2009), Catholic colleges and universities struggle to find ways to answer the question, “How do we use general education to make the Mission Statement Real?” (p. 5). As also noted by Nichols (2005) “All theology is ‘faith seeking understanding,’...” but each institution of higher learning must present its approach within the context of its own “local theology” (p. 14) which connects centuries of religious tradition with contemporary searches for understanding. Saint Leo’s local theology is rooted in its complexity (in geographic location, in delivery modes, and in the diversity of its student population). It also faces the challenge of having both full-time and adjunct faculty teaching within this complexity. The core values provide a common thread that unites us in our diversity, but only if they are made real for all. Indeed, beyond simply making the values visible, there is a felt desire at the university to live the values and this common aspiration and challenge is voiced in the Saint Leo University Alma Mater which calls upon all students and alumni “to make our vision real” (Van Wilt). Making the values real by learning to incorporate them in decision making is one aim of A Model for a Challenging World QEP.

Astin (2004) noted that while academe has focused on the exterior development of students’ lives (i.e., what students do), it has shown considerable neglect of students’ inner or affective development (i.e., what students feel). This existential sphere includes “values and beliefs, emotional maturity, moral development, spirituality, and self-understanding” (p. 34). As pointed out by Dalton and Crosby (2010), during the last two decades higher education institutions have attempted to “promote character values and behaviors in their students” (p. 1) by developing core values and cultivating a sense of community that affirms shared norms. Using the Benedictine values as a starting point, a faculty and staff committee developed Saint Leo University’s six core values in 2000. This section of the literature review focuses on issues important to faculty as they learn to help students develop habits of thinking which will allow them to incorporate their values into their decision making. These issues include learning definitions, vocabulary and language to discuss what values education is and is not; understanding the developmental processes of students; developing the skills necessary to successfully engage in values education; and understanding the challenges of teaching values both on a traditional campus and to adult students either in traditional classroom or online courses.

DEFINITIONS

Different words can be used when attempting to describe values and engage in values education. Morals, character, and virtues are examples. It is important for faculty to have a clear understanding of what is meant by values, however. Values can be defined as “a moral, social, or aesthetic principle accepted by an individual or society as a guide to what is good, desirable, or important” (APA, p. 975). Ferrari, Kapoor, and Cowman (2005) define values as “enduring beliefs representing relatively stable personality characteristics of an individual that give meaning and influence goal-directed behavior” (Feather, 1975 as cited in Ferrari, Kapoor, & Cowman, 2005; Rokeach, 1968). Individual
theorists approach the identification of values differently. Rokeach, for instance, distinguished between terminal values (i.e., those that reflect an end state or ultimate goal such as wisdom) and instrumental values by which individuals can attain terminal values (i.e., those that reflect modes of conduct or ideal behaviors such as honesty). Schwartz (1992), on the other hand, presented 10 values as desirable goals which “motivate action and serve as standards by which individuals justify actions” (p. 208). These goals include conformity, tradition, benevolence, security, self-direction, universalism, achievement, hedonism, power, and stimulation. Thus, values can be seen as goals that represent three particular universal obligations: (a) needs of individuals, (b) essential mores for social interaction, and (c) the functioning of groups for survival (Schwartz as cited in Ferrri et al.).

Morrill (1980) presented a set of definitions that helps in the understanding of values education. He clarifies that values clarification and values inquiry are not complete approaches to values education. “The phrase values clarification refers to a method of self-discovery by means of which a person identifies or clarifies his or her personal values and value rankings. . . . [in order to] enhance personal growth through heightened self-awareness” (Morrill, 1980, p. 12) and there are a number of techniques available for helping faculty and student affairs staff guide students in this process. Morrill notes, however, that a basic characteristic of values clarification is that “it can help a young person or adult discover how to value, but not what to value” (p. 16). While values clarification may have some role in higher education (to encourage self-knowledge), most academics would find it a psychological technique best used in student services areas such as career planning and counseling.

The term values inquiry refers to exploring “the meaning and possibilities of a human situation by discovering in it the values that motivate human choice and decision” (Morrill, p. 19). Citing the work of McGraph (1974), Morrill suggests that scientism’s influence on academics has resulted in “a model of knowledge and of education in which facts have been radically separated from values and in which neutrality in values has become a controlling norm. In their professional training, most teachers and scholars have learned well the lesson that values are not their proper concern” (Morrill, 1980, p. 19-20). Morrill feels that this level of approach to values education leaves many unanswered questions regarding the relationship between science and society, how hard ethical choices between conflicting values are to be made, and “how the transition from knowing to doing will occur” (p. 23).

DEVELOPMENTAL PROCESSES OF STUDENTS

It is also important for faculty involved in values education to have some understanding of human growth and maturation processes in order to be able to set moral education and development in its proper context. Morrill (1980) reviewed the work of Kohlberg, Perry, Chickering, and Heath as examples. Kohlberg, for instance, identified three levels of moral development: the preconventional, the conventional, and the postconventional with the word “conventional” referring to “the agreement among a group of people to establish and enforce their own standards—conventions—of conduct” (Morrill, 1980, p. 26). Thus, individuals at the preconventional level make moral judgments not yet based
on social and moral conventions. Those at the conventional level of moral reasoning make moral judgments based in terms of one’s obligations to other individuals in society. Finally, “at the postconventional level, group standards and laws are usually respected and accepted, but in the name of principles and values that transcend them” (Morrill, 1980, p. 26). Thus, it can be seen that individuals at any given level use specific patterns or structures of reasoning to make moral choices. “Moral cognition, according to Kohlberg, does not involve knowing or deriving specific ethical rules of conduct; rather, it concerns the structures through which reflection and experience in the moral sphere are first processed and organized” (Morrill, 1980, p. 27). Moral education for Kohlberg, then, involves presenting students with ethical issues and leading them in discussion so that “students are supportively challenged to justify and defend their positions. In the process, students gain experience in the all-important ‘moral’ skill of taking the perspective of others, and of seeing the self from an external point of view” (Morrill, 1980, p. 28). Thus, in Kohlberg’s approach students are exposed to “disequilibrium” or cognitive dissonance, which moves them toward a new set of cognitive patterns. Morrill (1980) points to several problems with applying Kohlberg’s theories to moral education at the level of higher education, however.

Perry’s (1970) work (based on longitudinal interviews with groups of Harvard undergraduates) during the 1950s and 1960s produced a list of nine positions which “reflect various assumptions that students have about the nature and characteristics of truth, values, and life goals” (Morrill, 1980, p. 36) and as students move through the positions they take on more mature or integrated perspectives. Thus, students move through the stages of dualism (i.e., viewing the world in terms of black and white with truth being absolute), multiplicity (i.e., acknowledging that there are multiple ways to view the world although they have difficulty evaluating them), relativism (i.e., viewing truth as being relative and accepting that everyone has right to their own opinions), and pluralistic commitment (i.e., beginning to explore and defend personal and intellectual positions within an awareness of the pluralistic world). Perry concluded from his work that moral development in students does not come “from the curriculum, but from the realization of community, which occurs as the student becomes aware that he or she is a part of a group of individuals who share their doubts and hopes in a common quest” (Morrill, 1980, p. 37). Perry cites the importance of faculty members and others who serve as models and concludes “moral development, then, depends not on what subject matter is taught, but on the total process of how it is communicated” (Morrill, 1980, p. 37). In addition, Perry (1970) makes note of:

the courage required of the student in each step in his development. This demand upon courage implies a reciprocal obligation for the educational community: to recognize the student in his courage and to confirm the membership he achieves as he assumes the risks of each forward movement. (p. 215)

Chickering devised seven vectors or tasks of student development during a four-year liberal arts education: (a) developing competence, (b) managing emotions, (c) developing autonomy, (d) establishing identity, (e) freeing interpersonal relationships, (f) developing purpose, and (g) developing integrity (Chickering, 1969 as cited in Morrill, 1980, p. 38). It is at this seventh vector that students “determine the values they wish to
live by” (Flowers, 2002). The connection between behavior and self-appraisal is especially important to Chickering and he “presents his findings on the development of integrity in terms of the humanizing of values, the personalizing of values, and the development of congruence” (Morrill, p. 38). This developmental theory posits that if students are influenced by the right mix of institutional supports, they will be more likely to complete all seven tasks.

Heath believes that students develop maturity during their college experience. “To become a more mature person is to grow intellectually, to form guiding values, to become knowledgeable about oneself, and to develop social, interpersonal skills” (Heath, 1968, p. 20 as quoted in Morrill, p. 39). To do so each individual can be seen in terms of four sectors: cognition, values, self-concept, and interpersonal relationships. Within each of these sectors, individuals develop along five dimensions of maturation. The five developmental dimensions he describes are (a) symbolization, or the ability to represent experience, (b) allocentrism, or other-centeredness, (c) integration, (d) stability, and (e) autonomy (Morrill, 1980, p. 39). In measuring these within the categories of cognition, values, self-concept, and interpersonal relationships, he found that students ranked development in values (i.e., integration of values) as ninth out of the 20 areas that most influenced students attending college. Interestingly, he found that when alumni (a number of years after graduation) were asked to rank these same dimensions of themselves that were influenced by attending college, they ranked stability of values as second after stability of self-concept (Morrill, 1980).

Morrill (1980) notes that developmental perspectives share at least three main points. First, the term education encompasses more than just academics. Indeed, “The curriculum embraces the extracurriculum as a full partner” (p. 43). Second, “developmental perspectives place little emphasis on the role of the content of knowledge in producing moral growth and maturity”…but suggest that “some of the most important enduring consequences of education seem to take place behind the scenes, so to speak” (p. 43). Finally, Morrill notes that the developmental stage of a student so fully determines the way he or she can grasp an issue that “effective teaching would seem to require the decoding of the students’ prevailing developmental patterns” (p. 43).

BEST PRACTICES
While it is hoped that over time the QEP Faculty Fellows will develop a list of outcomes as the result of values education at Saint Leo University, Morrill (1980) suggests that values education will require that students:

- be active in developing and defending their own positions;
- be challenged to probe deeply the justifications for human choices, especially their own;
- confront standards and points of view that counter their personal perspectives;
- be encouraged and enabled to assume the role of someone with a contrasting point of view; and
- wrestle with problems that have no simple solutions (Morrill, p. 101).
In order to foster these experiences faculty—whether fulltime or adjunct, whether teaching traditional students or nontraditional students, and whether teaching in a traditional classroom, a virtual classroom, via video teleconferencing or in an online environment—will often need to develop technical and interpersonal pedagogical skills.

In contrasting metaethics with normative ethics, for example, Morrill (1980) notes that each has different requirements for effective teaching. Metaethics puts its emphasis on discourse about ethical discourse while normative ethics focuses on "an effort to explore and to justify what ought to be done in a given moral situation" (p. 44). It is this focus on what ought to be done that is sometimes the primary educational concern. While he feels that ethics must be taught by trained professionals, other approaches can be taught by a wide range of faculty though "faculty members would need to develop some special techniques and analytical tools. How faculty would acquire these skills is an important and unanswered question" (p. 53). It is through faculty development and the QEP Faculty Fellows program that Saint Leo University hopes to explore for answers.

Morrill (1980) suggests that “one does not learn values or morality, it would appear, simply by hearing lectures, reading books, and mastering facts and theories” (p. 53). He identifies three needs. First there needs to be an emphasis on the need to promote active discussion that will create some disequilibrium in the students’ minds. Second, students should consider “real problems that present contrasting perspectives and underlying conflicts of values” (p. 54) such as those found in case studies and case histories. Third, there should be a focus “on disciplined and rigorous moral reasoning that can be learned as one learns any field” (p. 54). Still, Morrill reports, the reflective aspects of choice and developmental theories offer no “coherent theory of how education succeeds in providing the link between thought and action” (p. 54). Values can serve as standards of action, however. “Values can be defined as standards and patterns of choice that guide persons and groups toward satisfaction, fulfillment, and meaning…and serve as the authorities in the name of which choices are made and action is taken” (p. 63). Thus, values can be seen as relating self and the world. “The task of values is to link human needs and purposes with the opportunities and obstacles [i.e., challenges] of the world” (p. 67). Yet this is a complex relationship. “Values orient choice, they do not determine it. The same value can be the source of a myriad of divergent expectations, procedures, and actions in different cultures and different persons, and seen within the same person, as circumstances change” (p. 69).

Values education can make these connections. The five pedagogical aspects of methods of values education are described by Morrill (1980) as values analysis, values consciousness, values criticism, values pedagogy, and values development. Values analysis involves descriptive statements about what values are present in a situation and as such “can provide a superb interdisciplinary theme for liberal and professional education” (p. 81). It answers the question: what is really going on in a situation? Values consciousness “is exemplified in one’s awareness of one’s own values and those of the institutions in whose life one shares” (p. 82). It involves a learned skill of expressing what one is doing or experiencing. This, in turn, often involves leading a student through a period of disequilibrium (as suggested by Kohlberg and others) and works best, then,
when values education is made personal. “Values awareness embraces the classical belief that self-knowledge is the beginning of wisdom” (p. 88).

Values criticism goes beyond descriptive statements, on the other hand. “The ultimate pedagogical aim of values criticism is to develop in students an internalized capacity for the constructive self-criticism of values, that is, to educate conscience. It is able, thereby, to link knowledge and action” (Morrill, 1980, p. 91). Morrill posits that three conditions are necessary for values to exist: freedom, responsibility, and respect. Morrill also suggests criteria by which values can be judged: (a) consistency, (b) reciprocity, (c) coherence, (d) comprehensiveness, (e) adequacy, (f) duration, (g) authenticity, and (h) openness.

Each field, from art history to economics, will have characteristic ways of adapting and relating values inquiry to its own methods, literature and subject matter. The testing of values will bear a threefold imprint: that of the academic field, the topic at hand, and the criteria of valuing. (p. 96)

The principal achievement of values criticism “would be for students to internalize, to make permanently part of themselves, basic forms of critical self-assessment and social appraisal” (p. 97). In doing so, Morrill suggests that change becomes possible in a number of ways: e.g., when one value is replaced with another, when a value is implemented in a new way, or when the importance of one value changes in relationship to others. Changes in values can motivate changes in behavior because critical awareness of values educates conscience, i.e., “the internalized capacity for the constructive self-criticism of values” (p.91) and “as one reveals the contradictions, incoherence, narrowness, inauthenticity, rigidity, inadequacy, or destructiveness of one’s values (or disvalues), one’s conscience compels one to move in new directions” (p.99). Chickering (2000) supports this idea when he states that “education helps individuals develop increasing complex perceptions, concepts, competencies, perspectives, and ways of knowing and being to enable them to achieve their goals and to live their values” (p.24).

Morrill (1980) suggests a number of curricular possibilities for values education applying values analysis, consciousness, and criticism. These include the study of social choices and cultural issues requiring students to “analyze and evaluate the underlying values and dilemmas in social and cultural choice” (p. 102) and an examination of the good life by exploring “questions of virtue and lifestyle by analyzing literary, dramatic, religious, and philosophic works and applying the techniques of values criticism” (p. 103-104). Comparative cultural studies are particularly valuable as “there is perhaps no better way to grasp the full implications of one’s values than by coming to understand other ways of life” (p. 104). The moral imagination fostered by the arts through values consciousness can “appeal to our imagination, to our power to make present what is absent, to experience the meaning and weigh the consequences of human action” (p. 105). The learning provided by experiential learning and career preparation through internships, practicum, and service learning can be strengthened when values analysis, criticism, and consciousness are applied in seminars and assignments coordinated with such experiences. Finally, biography and autobiography (especially in the form of memoirs) can provide students with the opportunity to apply methods of values education to
understand how others have “measure[d] success and failure, meaning and fulfillment” (p. 106).

Such teaching has implications for instructors’ roles and responsibilities. In discussing teaching materials Morrill (1980) suggests:

Perhaps the dominant pedagogical characteristic is the need for a continuing movement between experience and reflection, the concrete and the abstract, practice and theory. Case studies and case histories, court decisions, policy statements, ethical codes, primary sources, and artistic works all provide the rich texture of experience as lived, from which values can be elicited and made the subject of critical and theoretical analysis. Discussions of cases in values education need to steer a course between aimless comments and lock-step responses. The broad goal should be to locate alternative possibilities and to consider their consequences, to see how value commitments shape the alternatives, and, as appropriate, to review the values themselves as to their consistency, coherence, comprehensiveness, adequacy, and duration. (p. 107)

Interpersonal skills play a major role in values education. Chopp (2006, interview by Jon Dalton) suggests that coaching is “a powerful metaphor for mentoring and character development” (p. 2) because coaches set high standards and then provide feedback in a relationship of trust as students strive for excellence. Morrill (1980) notes the importance of an atmosphere of “acceptance and openness,” especially when students are experiencing a period of change or disequilibrium. Because students often find it difficult to take public positions, “effective teaching for values involves open-ended discussions and the occasional use of techniques such as role playing, debates, simulations, and games” (p. 107). Small-group work assignments with each group assuming responsibility for developing and defending a point of view allows students to express themselves openly rather than “saying only what they think would please their professor” (p. 107). Additionally, the instructor must from time to time “shed the role of authority and at relevant times to reveal his or her own values and commitments, with all the risk and vulnerability that this entails” (p. 108). Instructors also can serve as models “of self-criticism in the correction of personal biases and preferences” (p. 108) by applying rigor and discipline to their own experiences. Thus, good values teaching relies “on strong interpersonal skills because values education is more than the mastery of information and formal methods; it is the marriage of probing and religious intellectual analysis with empathy and human sensitivity” (p. 108). In addition, “instructors may have to make an explicit effort to interpret and decode the rapidly changing symbols and expression of the cultural, psychological, and intellectual world of students” (p. 109). Faculty must understand the technological divide and new approaches to social networking. The Saint Leo University homepage, for instance, contains icons for Facebook, Twitter, You Tube, and MySpace, all of which serve as symbols of the social networking platforms engaged in by contemporary students. In addition, they must understand the developmental stages suggested by theorists such as Kohlberg and W. Perry so that they can present materials for which students at different levels of development can be receptive.

These stages provide a kind of filter that selects as reality certain features of experience. Limits are set as to what can even count as true, authoritative, good, or meaningful.
Values educators who lack a sense of what these stages and filters are, of how students typically “see things,” will miss their mark. Courses for freshmen should not be designed and taught in the same way as those for seniors. (Morrill, 1980, p. 109)

Morrill (1980) also suggests that a key to values education is the viewing of the teacher as model or mentor. “One learns best the values required for good scholarship—patience, tolerance, rigor, fairness, precision—by seeing them in action, by experiencing their authority with and through another person” (p. 115). This does not require friendship and closeness. “The aim is not to invade the self’s privacy; rather it is to address those common commitments, promises, and values, such as truth and excellence, through which persons become enfranchised to participate in a community of liberal learning” (p. 114-115).

Morrill (1980) proposes the following for values development at an institution: (a) awareness; (b) organizational, faculty, and staff development; (c) participation in the life of the organization; (d) selection and evaluation of faculty staff; and (e) the practice of tradition. In terms of awareness, he suggests that most college campuses do not track the informal norms of the institution.

What, in other words are the forms of behavior that are ignored, tolerated, praised, and blamed? What are the penalties for breaking the norms? What does the senior tell the freshman? How hard must one work, or appear to work, or say one works? Is preparation for graduate and professional school the silent requirement for academic respectability? (p. 119)

He also posits that “Educational institutions need a continuing, carefully planned audit of how people understand their own roles and responsibilities and those of others in the community” (p. 120). The resulting consciousness of actual campus values and norms can be invaluable in helping faculty and student services staff understand (especially when interpreted in terms of developmental theories) and set goals for values education.

In terms of organizational, faculty, and staff development, Morrill (1980) suggests that faculty and staff professionals can learn about their own needs and motivations, as well as about those of their students, through programs of many types. The university has a strong history of faculty and staff development with programs presented in a number of venues. Examples include lunch and learn programs, faculty development days, guest speakers on various educational topics, technology fairs, and the Leadership Saint Leo program. Morrill further suggests that “rather than continuing to deplore the weaknesses in campus advising, effort could and should be directed toward training interested individuals in basic counseling and listening skills, as well as in some of the developmental dynamics of young adults” (p. 121).

In terms of selection and evaluation of faculty and staff, Morrill (1980) suggests that an institution’s personnel system and procedures should recognize that “in effective values education, faculty and staff members find their fulfillment in the fulfillment of others—their students” (p. 123). Finally, in terms of the practice of tradition, Morrill (1980) notes that “memory and ritual combine to express the community’s meaning to itself” (p. 123). Saint Leo University does this in many ways. Examples include Academic Excellence
Day, Community Day for faculty and staff, Community Service Day for all on the University Campus, and Veterans Day observances.

King and Mayhew (2002) reviewed articles using the Defining Issues Test (DIT), which reflects Kohlberg’s stages of moral development, to measure the moral development of undergraduate college students. They report that the longitudinal studies they reviewed suggest that as students progress through college they “tend to decrease their preference for conventional level reasoning and increase their preference for post-conventional moral reasoning” (p. 249). In comparing institutional contexts, findings indicate that “the environment of liberal arts colleges tends to be more conducive to fostering the development of moral reasoning than that of other types of colleges and universities” (Pascarella & Terenzini, 1991, as cited in King & Mayhew, 2002, p. 253). Research comparing different academic disciplines has yielded inconclusive results, however.

King and Mayhew (2002) also looked at different intervention strategies “designed intentionally to promote the development of moral reasoning among college students.” While they point out difficulties in a number of the research designs used in these studies, they did find that the majority of the intervention strategies resulted in increases in moral judgment. The interventions included such varied (usually one term in length) approaches as ethics courses, service learning or community service programs, an outdoor education program, and a freshman colloquium on psychosocial issues. When examining other collegiate contexts on moral development, King and Mayhew reported evidence that reflection rather than instruction, diversity of friendships, membership in Greek organizations, and competitive versus noncompetitive situations may all be important factors in moral development.

In addition, King and Mayhew (2002) reported on ten studies investigating the relationship between moral judgment (as seen in comparing high versus low DIT scores) and moral behavior in college students. Examples included quasi-experimental studies involving differences in students with high or low DIT scores in pointing out errors in work ostensibly written by the investigator, the effects of a case-oriented ethics intervention in an auditing course, in self-reports of academically dishonest behaviors, in cheating behavior in an attention-concentration test, and in moral reasoning as a mediator in the relationship between AIDS knowledge and risky sexual behavior. In summary, they reported that “a wide variety of factors can foster moral development, which is important as there are few distinct experiences that are shared by most college students” (p. 263).

Early research on the development of moral reasoning in college students indicated (as measured with Kohlberg’s Moral Judgment Interview) that students produce scores centering between stages 3 and 4. Thus, students make moral judgments somewhere in between those based on “maintaining good relationships and the approval of others” and maintaining order in society by way of rules and laws (Whiteley, Bertin, & Berry, 1980, p. 37-38). Research using the Defining Issues Test indicated that college students evidence higher levels of moral reasoning when compared to that of nonstudents. “Average scores tend to increase about ten points at each level of education as the
student progresses from junior high school to senior high school to college and to graduate or professional school ....” (Rest as cited in Whiteley et al., 1980). As the authors point out, adults continue to encounter moral dilemmas in their lives, but plateau once they have left school. Thus, age alone does not contribute to increases in moral reasoning. Educators, then, must ask what types of educational experiences help raise the level of moral reasoning? Whitleley et al. (1980) present evidence that “the extracurricular experiences and particularly the living environment provided by college life are perceived by students as influential in changing their reasoning about moral issues” (p. 49).

Puka (2005) makes the argument that while most universities try to cultivate social responsibility in students through both theory (e.g., ethics courses) and practice (e.g., service programs), they tend to focus only on narrow aspects of ethics. He contrasts a “taskmaster” view of responsibility (i.e., self-sacrificing in the interest of others) with a more transformative “response-ability” (i.e., our ability to respond well and self-gratifyingly to others) and makes the point that only this latter approach will work in helping students adopt ethical thought and behavior. Puka looks to the literature on moral exemplars to discuss integrity. Using Ghandi’s idea of integrity meaning to live one’s life as an open book in which one conducts “a long series of experiments in better living that others could analyze, learn from, and criticize” (p. 24), Puka suggests that we are all capable of living our lives in such a manner meant to help us continually strive to become a better person as opposed to just, for instance, daily trying to be honest (e.g., by not telling lies).

Alverno College identified eight abilities students are expected to develop during the course of their matriculation at the college (Engelmann & Geenen, 2010). Included in this list is valuing in decision making. Graham (2010) notes that valuing is not made up of pre-determined sets of values, ethics, or morals nor is it a professional ethics code. Rather, valuing “is a process (or processes) of decision making based on multiple sources and having multiple indicators.” Valuing is taught across the curriculum and at advancing developmental levels beginning in general education courses and advancing with courses within the majors. Englemann and Geenen (2010) surveyed faculty teaching courses in the majors and found that case studies, philosophical frameworks and codes of ethics, mentoring and role models, experiential learning (e.g., internships, interviewing, and guests on campus), and using systematic reflection involving valuing in decision making all were used as strategies for teaching professional responsibility.

Astin (2004) suggests that a number of developments in higher education are generally supportive of teaching more to the spiritual (broadly defined) aspects of conscious experience. These include a redirection of faculty from teaching to learning, emphasizing learning communities as opposed to thinking in terms of individual teacher and learner, the inclusion of Freshman 101 courses to encourage students to look both at academics and developing their purpose in life; and service learning experiences (with emphasis on the connectiveness of all involved and on personal reflection which encourages students to look not only at the academic content of a course, but also how the experience has helped give insights into what kind of life the student may want to lead).
The Australian government’s values education initiative is attempting to systematize the way both its schools and colleges approach values education. Weston (2010) notes that:

Parents and teachers often struggle with teaching values, often resorting to a didactic approach. However, what has been evidenced in multiple values education projects is that when students are given the language, the understanding, the time to reflect and discuss, and the ability to see what values in action looks like in their lives, their behaviours change in a variety of positive ways. (p. 16).

Drawing on national and international research in values education, they have devised the following good practice principles:

- Establish and consistently use a common and shared values language across the school.
- Use pedagogies that are values-focused and student centered within all curriculum.
- Explicitly teach values so students know what values mean and how the values are lived.
- Implicitly model values and explicitly foster the modeling of values.
- Develop relevant and engaging values approaches connected to local and global contexts and which offer real opportunity for student agency.
- Use values education to consciously foster intercultural understanding, social cohesion and social inclusion.
- Encourage teachers to take risks in their approaches to values education (p. 15)

Another challenge and opportunity for faculty stems from the many ways technology is providing new opportunities for teaching and learning. This may be especially true for values education. Faculty, however, need time and training in order to be able to incorporate such techniques into their classes. Bliss (2008), for instance, reports on a project in which students select a short clip from YouTube, “analyze it for impact on audience, and then to connect it to their values and to the values of their audience” (p. 6). The resulting five minute Hip Clip “is divided into two and a half minutes of clip and two and a half minutes of values’ analysis” (p. 6). She reports that “when students are allowed to select what is meaningful in their lives and then show it to others….People become associated with the values and sensibilities in the clip and students begin to connect in new ways” (p. 8). The QEP Faculty Fellows program would aim to guide faculty as they learn to apply technology to their courses to enhance student learning in such meaningful ways.

**CHALLENGES FOR TEACHING AND ASSESSMENT**

It is important for faculty to realize that values education is not a matter of indoctrination, rather it involves an individual and autonomous process. Bok (2006) suggests that “It is not the place of faculty members to prescribe what undergraduates ought to consider virtuous. But surely faculties should do whatever they can to prepare their students to arrive at thoughtful judgments of their own” (p. 150). While Foster and LaForce (1999)
did find that students in Christian colleges who persisted throughout four years did evidence positive growth in moral reasoning reflective of the institution’s mission statement, Ferrari et al. (2005) found that the students in their study “viewed their school’s mission and values separately from their own personal value system” (p. 217).

Another challenge to teaching and assessment for the university comes from its development of online courses. As suggested by Johnson, Osguthorpe, and Williams (2010), while research in this area is in its infancy, preliminary results have been positive as to the feasibility of teaching character in an online course. They conducted a qualitative research study to attempt to understand why a particular distance education course (Christian Fantasy Literature) was rated highly by students as being effective in developing character. Their method involved conducting a series of in-depth conversational interviews with both the instructor and the students who had completed the course. Important to Saint Leo University’s circumstances was the fact that their results indicated that “students provided a wide variety of responses to character-related outcome, and even though themes emerged from their responses, the character-building aspects of the course were unique to each student” (p. 14).

The core values are a visible symbol of the aspirations of the members of the university community. Master syllabi include core values which have been selected to be emphasized in each course. Yet, faculty may feel uncomfortable in discussing values and may not know how to incorporate values into course assignments and discussions in a meaningful way. The QEP Faculty Fellows program will be designed to expose faculty to vocabulary and concepts about values education and student development so that they can view their course planning in a new light. It will also give them the opportunity to learn new teaching techniques and skills to help them develop values related assignments which can be embedded in course content and are appropriate for the developmental level of students they teach.

The Saint Leo University QEP has the following values education learning objectives for students:

- Students will demonstrate knowledge of the university core values and their definitions.
- Students will apply the university core values to discipline-specific situations.

This review of the literature on values education suggests that in order to accomplish these goals, faculty need faculty development support to appropriately integrate values concepts into their teaching of course content. This training should include:

- Learning basic concepts of what values education hopes to achieve in students.
- Providing course assignments meant to give practice in applying university core values to situations within their discipline.
Critical Thinking + Core Values = Decision Making

While this literature review has presented information about critical thinking and values education in separate sections, Saint Leo University’s QEP is based on connecting the two in order to encourage habits of thinking which will support effective decision making in students and, ultimately, in graduates. As noted by Chickering (2010) in a recent retrospective on higher education’s commitment to both moral and civic education, it took decades for American higher education to evolve from a “‘meritocratic’ orientation—educating the best and the brightest” (p. 1) with its focus on “information transfer, with almost total reliance on lectures, texts, and mid-term and final exams” (p. 1) to the beginning in the 1970s of open admissions and the massification of higher education. Yet, “even as late as 1989, outcomes concerning moral and ethical education, other dimensions of personal development, and civic engagement were not part of the general conversation” (p. 3). Today, students and parents concentrate on short term goals “oriented toward a well-paying job upon graduation” (p. 5). Chickering argues this is short-sighted and higher education must come to be viewed as a “public good rather than a private benefit” (Abstract, p. 1). He goes on to state:

Certainly the high order cognitive skills required to see through the mis- and dis-information, and to examine our complex issues with the critical judgments they require, are necessary. But they are not sufficient. That thinking, and the resulting judgments, must be anchored in clear recognition of their fundamental moral implications concerning human dignity and well being. (p. 5)

Many others also have long noted the need for the connection between critical thinking and values. Morrill (1980), for example, notes:

Values exist in, with, and through thinking, doing, and feeling. An education in values offers integrative themes in the critical analysis of human choice and action, and can contribute to the renewal of liberal education and the enhancement of professional education. (p. 75)

McGraph (cited in Morrill, 1980) suggests that many of the most critical social and human problems of the modern world involve significant value conflicts and “require choice and decision based not only on facts and knowledge, but on values as well” (p. 20). Halpern (2001) believes that combining critical thinking within a system of values produces wisdom.

Critical thinking, decision making, and wisdom are all commonly used terms with broad agreement as to their meaning. I think of critical thinking as being comprised of critical thinking skills (or strategies), the disposition to use these skills, and metacognitive monitoring of the critical thinking process. “Wisdom” comprises all of these components, plus a way for deciding which goals should be desired, a way that is based on a balance among self and other interests and short- and long-term goals. (p. 255)

BEST PRACTICES

In discussing the Association of American Colleges and Universities’ (AAC&U) Liberal Education and America’s Promise (LEAP) initiative, Colby and Sullivan (2009) focus on
the learning outcome of personal and social responsibility in terms of the AACand U's Core Commitments initiative’s five key goals (i.e., striving for excellence, cultivating personal and academic integrity, contributing to a larger community, taking seriously the perspectives of others, and developing competence in ethical and moral reasoning). These goals, it may be noted, are quite similar to the core values of Saint Leo University and, as at Saint Leo, they suggest that “colleges should aim to teach students how to use knowledge and criticism not only as ends in themselves but also as means toward responsible engagement with the life of their times” (Colby & Sullivan, 2009, p. 22).

Colby and Sullivan (2009) further suggest that three developmental dimensions (identity formation, development of a sense of purpose, and cultivation of a “life of the mind” in terms of reflection and criticism) are the foundation for the five elements of personal and social responsibility. They note that “college is a prime moment in life for students, including many older students, to question and redefine their core sense of who they are” (p. 24) and developing such a sense of identity grounded in positive values can lead to a true sense of purpose. Purpose can be defined as “a stable and generalized intention to accomplish something that is at the same time meaningful to the self and consequential for the world beyond the self” (Damon, 2008, as referenced in Colby & Sullivan, p. 24). Finally, the intellectual engagement that defines the life of the mind can be called “practical reasoning” (Sullivan and Rosin, 2008, as cited in Colby & Sullivan, p. 24) and one can see the connections to Saint Leo University’s QEP in such reasoning. In particular, the authors make the point that in developing such practical reasoning higher education must go beyond assuming that critical thinking is “a sufficient scholarly and scientific ideal and educational goal” (p. 27). Rather, they suggest that “in order to prepare for decision and action in the world, students need to develop not only facility with concepts and critical analysis but also judgment about real situations in all their particularity, ambiguity, uncertainty, and complexity” (p. 28).

Connor (2008) explores the relation “between the development of cognitive capacities such as critical thinking, and ostensibly purely ‘personal’ things such as the development of motivation, values, spiritual growth, and well being” (p. 8). He concludes that they are “inextricably connected” (p. 8) so that higher order cognitive capacities are necessary “to formulate rich and lasting values and to relate to personal decision making” (p. 8). He refers to the cognitive psychology term postformal reasoning which is the type of reasoning required when there is no single right answer to a problem and notes that these are types of questions students and adults face every day.

The essence of the kind of educational experiences the QEP hopes to achieve can be found in what has come to be labeled transformative education. Transformative education “is the process of encouraging students to change from being receptacles of knowledge to more meaningful learning through considering different viewpoints and questioning their own beliefs, values, and assumptions” (Riggs & Hellyer-Riggs, 2009). Working from an adult education perspective, Cranton (2002) presents seven facets (conditions and processes) of transformative learning which would help create learning environments to promote transformative learning in any course. These facets are:
Saint Leo University

- an activating event that typically exposes a discrepancy between what a person has always assumed to be true and what has just been experienced, heard, or read;
- articulating assumptions, that is, recognizing underlying assumptions that have been uncritically assimilated and are largely unconscious;
- critical self-reflection, that is, questioning and examining assumptions in terms of where they came from, the consequences of holding them, and why they are important;
- being open to alternative viewpoints;
- engaging in discourse, where evidence is weighed, arguments assessed, alternative perspectives explored, and knowledge constructed by consensus;
- revising assumptions and perspectives to make them more open and better justified; and
- acting on revisions, behaving, talking, and thinking in a way that is congruent with transformed assumptions or perspectives. (p. 66)

Both Cranton (2002) and Riggs and Hallyer-Riggs (2009) present a number of teaching strategies to stimulate transformative learning. Cranton suggests specific assignments to support each of the seven facets listed above. Examples include assigning readings that present more than one point of view, contrasting the results when an issue is addressed first through ordinary discussion and then through engaging in optimal discourse in which knowledge is considered using critical thinking skills, and having students write action plans for when they leave the course. Riggs and Hallyer-Riggs present examples of transformative learning assignments in two different types of institutions and content areas. In an adolescent psychology course at a large public university, for instance, an activating event was found in an exercise titled What's in a label?: Investigating what we buy, wear, use, and throw. For this exercise students are asked to select one or two items of clothing or accessories they wear. They then note the manufacturer’s brand name, where the item was made, the price, and their reasons for buying it. “They also think about the target market or demographic at which the product is aimed. Then, they find out as much information as they can about the corporation’s manufacturing practices and policies” (p. 401), using websites the instructor provides. This information is presented in class and then the students discuss their findings and their reactions, including how they now feel about the article they chose.

In a course titled Modernizing and Contemporary Europe, students at a small private comprehensive university focused on the European Union to discuss the types of criteria that can be used to judge the relative merits of various political and economic systems (Riggs & Hallyer-Riggs, 2009). When assigned to write research and reflection papers on quality-of-life indices, students had the following reactions:

Most expressed shock in finding the United States well down the list in life expectancy, healthy life expectancy, infant mortality, and a number of other indices. They admitted being disturbed. They had felt secure in the assumption that they lived in the best of all possible societies. At the minimum, they had to reconsider how to understand relations among self, community, and world and, more concretely, how to assess their own selves and communities. (p. 407)
Berkowitz and Simmons (2003) discuss ways in which character education, science education, and democratic citizenship are linked and suggest transactive discussion in peer interactions as a way to accomplish this. While their discussion is aimed toward elementary and secondary school education settings, their concepts can also be seen as applicable to higher education settings. Transactive interaction occurs when one discussant demonstrates clear discursive evidence of reasoning about another discussant’s reasoning” (p. 129). Berkowitz and Simmons identify three levels of transactive interactions. The highest form is termed operational and occurs when one discussant actively operates on the other’s reasoning by clarifying it, critiquing it, or refining it. Thus, the discussant’s cognitive interaction with the other’s ideas can be said to be transformational because he or she has cognitively operated on it. A lower form of transactive interaction is termed representational and occurs when one discussant merely re-presents the other’s argument by acknowledging or by paraphrasing it. Finally, the lowest level transactive interaction is termed elicitational and occurs when one discussant simply elicits further reasoning from the other discussant but without personally representing it or operating on it. The authors present a number of examples of each type of interaction and conclude that using such discussions can fulfill both the traditional knowledge-transfer goals of science education and the broader goals such as those set forth by the National Science Education Standards which call for students to be able to “use appropriate scientific processes and principles in making personal decisions; engage intelligently in public discourse and debate about matters of scientific and technological concern” (1996, p. 13).

White (2008), a Saint Leo University professor, has developed a series of discussion questions tying critical thinking to values related to specific topics in a mathematics course. She explains to students:

    You must choose a path. You must take the steps. You must ask the questions. You must find the answers. Do this and your college experience will change your life. You will be transformed, empowered, and educated. Not only this, but throughout your life you will transform, empower and educate others. (White, p. v)

Meszaros (2007) also notes the importance of faculty (and student affairs professionals) as she discusses the concept of self-authorship as involving students learning to listen to an “internal sense of identity” (Magolda as cited in Maszarsos) which gives them the capacity to define their own beliefs, identity, and relationships. In doing so, she suggests that students’ college experiences can be seen as a journey during which students reshape what they believe, their sense of self, and their relationships with others. As the student takes this journey, she suggests visualizing a tandem bicycle. The rider in front is the student “who decides the direction and is in charge of making decisions” (p. 12) and the rider on the back is “the teacher or student affairs professional, who stokes the bike, providing challenge and support” (p. 12).

The QEP’s secondary focus on increasing faculty instructional skills will give them the vocabulary to explain to students the fundamental components of critical thinking and values, and how they can result in effective decision making. The QEP’s Faculty Fellows
will engage in an ongoing process of self-reflection, essential as they “guide the studies of others” (Waterson, 2009). As a result, faculty will be able to:

- design transformational course assignments with real world applications,
- develop learning tasks that ask students to internalize ownership of assignments,
- learn the language of the new technology so students become our partners in sharing their new skills in technology, and
- promote the collaborative learning in which students today excel.

In order to develop identity, purpose, and practical reasoning in students, Colby and Sullivan (2009) urge colleges and universities to “pay attention to questions of meaning, purpose, and personal identity in the classroom” (p. 29). It can be argued that the values component of Saint Leo University’s QEP aims to do this by not just identifying core values to be emphasized in each course, but by teaching faculty how to make them an integral part of the learning process for each student in their courses. They also urge colleges and universities to “incorporate throughout both the curriculum and the co-curriculum high-quality experiential learning, using active, hands-on, collaborative, inquiry-based pedagogies” (AAC&U, 2007 as cited in Colby & Sullivan, 2009, p. 29).

Saint Leo University’s QEP will accomplish this by emphasizing the types of transformational learning experiences discussed above. Currently, the university does this by providing internships, practicums, service-learning opportunities, volunteer activities, and an emphasis on active learning in every course. Finally, Colby and Sullivan propose that colleges and universities “enhance the culture’s support for personal and social responsibility by providing inspiring models, embedding symbols of key values throughout the campus, and paying attention to rituals and other aspects of socialization into the campus community” (p. 29). Saint Leo University does this through its orientation programs, through the depiction of the university’s core values institution-wide, Community Day activities, and matriculation ceremonies. Activities celebrating and engaging the goals of the QEP also will contribute to this socialization process.

Tsui (2002) points out that institutions truly committed to instilling critical thinking in students must “actively support and guide faculty in teaching reform efforts” (p. 759). Training through faculty-development seminars and workshops needs to be ongoing. Furthermore, avenues for collegial exchange on teaching need to be sought out and instituted” (p. 759). Such opportunities not only will provide collegial support for faculty as they attempt new pedagogical techniques, but also “yield a more united front against student resistance” (p. 759) to the hard work of engaging in critical thinking.

The Saint Leo University QEP has the following learning objectives for students as they learn to apply critical thinking and values to decision making:

- Students will link critical thinking and values in decision making.
- Students will articulate a rationale for and defend decisions made using a critical thinking, values-based model.

This review of the literature about teaching critical thinking within a values-based curriculum suggests that in order to accomplish these goals, faculty need development
in order to devise and experiment with new approaches to teaching the content matter of
their courses. These development opportunities should include:

- training in how to apply the knowledge gained about critical thinking and values
  education to their teaching,
- time allotted for learning new pedagogical techniques and for devising course
  assignments that will provide the kind of transformative learning and continual
  practice necessary for students to develop the habits of applying both critical thinking
  and values to decision making, and
- support for the “risk taking” required of faculty making these transitions in their
  teaching approaches.

CONCLUSION

Saint Leo University’s QEP, A Model for a Challenging World, includes a number of
aspects which recommend its future success. In discussing the implementation of a
program to assess critical thinking in a school of business, Peach, Mukherjee, and
Hornyak (2007) note the importance of such factors as the realization that assessment is
a journey that “requires constant reevaluation, revision, and improvement of procedures”
(p. 315), commitment from stakeholders such as faculty and administrators, allocation of
financial and other resources, and the need for champions for the project. All of these
are present at Saint Leo University. In addition, as reported by Glass and O’Neill (2010),
it has the potential for success both because of the propitious condition of our
reaccreditation and as a natural outgrowth of the university’s historical commitments.
Saint Leo University is at a unique time in its history in which the reaccreditation process
is providing us with an opportunity to bring focus on the next steps we will take to move
“from good to great” (Collins, 2001) and in doing so we are building on what we have
been doing for a very long time. The QEP will provide all stakeholders with a larger
framework and vocabulary for discussion about the university’s goals. It will bring
together both academic and student affairs in dialog and it will involve faculty
development. It will build on the developing culture of the scholarship of teaching and
learning at the university by emphasizing assessment of goals developed by faculty for
their risk taking in trying new teaching techniques. It manifests itself in the learning
outcomes which are captured for the university’s traditional students in the tag line
“You’ll love the person you become here” and for continuing education students in the
tag line “What you need for where you’re going.” It stems from the university’s mission
statement, needs suggested by data about students, and a national urgency for the
goals of higher education.

As this literature review is being completed, new research has emerged about American
college students. Arum and Roksa (2011, as cited in Carey, 2011) conclude from their
study of 2,300 statistically representative undergraduates from 24 diverse colleges and
universities enrolled as freshmen in 2005 that “What students do in higher education
matters. But what faculty members do matters too” (p. A64). Carey indicates:

The study suggests that we have overcomplicated the practice of higher
education. It comes down to what it always has—deep engagement with
complex ideas and texts, difficult and often solitary study, and the discipline to
write, revise, and write again. What students need most aren’t additional social opportunities and elaborate services. They need professors who assign a lot of reading and writing. Professors, in turn, need a structure of compensation and prestige that rewards a commitment to teaching. (p. A64)

We are, as a commonly used metaphor at Saint Leo University says, “not just carving stones, but building a cathedral” as we work toward increased learning outcomes for our students as they acquire the habits of thinking which will allow them to combine critical thinking skills and core values to make effective decisions as “a practical, effective model for life and leadership in a challenging world, a model based on a steadfast moral consciousness that recognizes the dignity, value and gifts of all people” (excerpt, Saint Leo University Mission Statement).
**ACTIONS TO BE TAKEN**

**Infuse Critical Thinking and Core Values into General Education.**

The general education program provides the foundation for student learning. It is the logical place for faculty to teach and for students to develop critical thinking skills. It also is the logical place for students to learn about the university core values, and ultimately, to apply critical thinking and values to their own decision making, both in and outside the classroom.

To accomplish the goals set out in the QEP it will be necessary to review and revise the current general education curriculum. To oversee this effort, a general education review team was put in place. To prepare for its work, the team is attending the 2011 American Association of Colleges and Universities Institute on General Education and Assessment in June.

The university now has a plan in place with the goal of creating a “signature” general education program that incorporates the key components of the QEP. To facilitate the development of a signature general education program, a request for proposals (RFP) will be developed by members of the general education review team in consultation with the vice president for Academic Affairs. This RFP will outline the basic requirements for the redesigned general education program, including the need to address QEP expectations. Faculty members will have the opportunity to respond to this RFP by presenting a general education design that focuses on student learning outcomes. It is envisioned that all proposals will be submitted by December 2011. Once the new program is selected, the spring 2012 semester will be devoted to course development.

During fall 2012, the formal proposal for the new curriculum will be submitted to the Saint Leo University Senate’s Undergraduate Program and Curriculum Committee. Several of the courses will be piloted as special topics courses on University Campus, selected continuing education centers, and the Center for Online Learning. The pilot will allow students to become engaged with the new general education curriculum quickly and to allow course designers the opportunity to receive feedback on their new courses from students across the university. The new general education curriculum will be formally initiated with the 2013-2014 academic year.

**Table 5 Timeline for the Revision and Implementation of General Education Curriculum**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011 August</td>
<td>Release RFP for new general education curriculum</td>
</tr>
<tr>
<td>2011 December</td>
<td>Proposals for general education due</td>
</tr>
<tr>
<td>2012 January</td>
<td>Presentations of proposals and faculty vote</td>
</tr>
<tr>
<td>2012 January-May</td>
<td>Develop master syllabi for new courses</td>
</tr>
<tr>
<td>2012 Fall</td>
<td>Submit new general education courses to Undergraduate Program and Curriculum Committee</td>
</tr>
<tr>
<td>2012 Fall – 2013 Spring</td>
<td>Pilot new courses as special topics courses</td>
</tr>
<tr>
<td>2013 Fall</td>
<td>Formally implement new general education curriculum</td>
</tr>
</tbody>
</table>
One aspect of the signature program will be the infusion of critical thinking into the curriculum. A variety of learning activities and class projects will provide opportunities for students to further develop, apply, and integrate critical thinking and values. Early conversations about the redesign have emphasized the value of major experiential requirements that involve the development and application of critical thinking and a discussion about how core values and critical thinking inform decision making (self-authorship).

When general education courses are being revised, specific attention will be given to the role of critical thinking and core values in the courses. For example, the courses will be evaluated in terms of the extent to which assignments and assessments:

- require students to demonstrate, develop, and/or apply critical thinking skills;
- involve students in identifying and applying the university’s core values and/or personal values;
- ask students to identify how values and critical thinking inform decision making (self-authorship);
- produce assessable evidence of critical thinking and/or core values; and
- include rubrics to assess critical thinking skills and core values.

Revision of the general education curriculum directly affects student learning by incorporating instruction in critical thinking, university core values, and the use of critical thinking and values in the first courses students typically take with Saint Leo University.

**Revise Courses in Academic Majors taught by the QEP Faculty Fellows.**

Comments made during faculty focus groups and open-forum discussions emphasized the perceived need among faculty participants for developing their abilities to teach critical thinking skills without compromising course content. Although the March 2010 survey of general education faculty identified ways faculty members work to improve students’ critical thinking, it also pointed to the opportunity to enhance the methods faculty currently employ. The QEP Faculty Fellows program is designed to create a cadre of faculty members skilled in teaching critical thinking and in applying values and critical thinking to good decision making. In addition to strengthening their own teaching, they share their insights and skills across the university. The QEP Faculty Fellows program will directly affect student learning.

1. In their first year as fellows, participants will introduce learning activities to strengthen critical thinking and/or the application of values in at least one of their courses.
2. In their second year as fellows, participants will redesign one course they teach in the major to incorporate the use of values and critical thinking in making effective decisions. This will result in redesign of the course master syllabi, thereby affecting how all sections of the course will be taught in the future. The instructional technology department will be responsible for revising the online versions of these courses to incorporate the changes.
Figure 1 presents an example of how a course within an academic discipline could be amended to help students achieve the QEP learning outcomes. EDU 304, Human Exceptionalities in the Classroom, is a junior-level course taken by all undergraduate education majors near the beginning of their major coursework. The rubric has been amended to assess critical thinking skills as applied to a case study response focused on decision making related to student learning needs. In order to build upon skills learned during general education coursework, content also will be added to the course reinforcing information on critical thinking and connecting these skills to the discipline.
Case Study Responses Task and Rubric  EDU 304

Name__________________________ Date Completed________________________

Students will answer the questions at the end of each case study thoroughly and with attention to the criteria below. Answers should draw on students’ personal experience, beliefs, knowledge of learning theory, and references from the textbook or other resources. One ‘right’ answer is not the goal; critical analysis with support is.

**Rating:** Consider the student’s level in the program (semester I, II, or III)
- Exceptional corresponds to an A (90-100). Performance is outstanding, significantly above the usual expectations.
- Proficient corresponds to a B to B+ (80-89%). Skills and standards are at the level of expectation.
- Basic corresponds to a C to C+ (70-79%). Skills and standards are acceptable but improvements are needed to meet expectations well.
- Novice corresponds to a D to D- (50-69%). Performance is weak; the skills or standards are not sufficiently demonstrated at this time.
- No This criterion is missing or not in evidence.

Compute a holistic score for each element by placing check marks in the appropriate boxes. OR compute an analytic score by assigning points for each element, following the percentages indicated below.

<table>
<thead>
<tr>
<th>Elements</th>
<th>Criteria</th>
<th>Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Knowledge of Disability 30%</strong></td>
<td>Identified interpretive issues that may arise when English language tasks are used to assess reading growth in ELLs (APAS 1.2) (to align with Consent Decree stipulations)</td>
<td>Novice</td>
</tr>
<tr>
<td></td>
<td>Applies theory and research that match characteristics of students with exceptionalities (Conscious Intent to Think Critically; Identify Structural Causes) (APAS 7.2)</td>
<td>Basic</td>
</tr>
<tr>
<td><strong>Activities/Responsibilities 50%</strong></td>
<td>Appropriate instructional activities that will meet student needs and draw on well-established learning theories are suggested</td>
<td>Proficient</td>
</tr>
<tr>
<td></td>
<td>Uses specific assessment data and information from case studies to make instructional recommendations, especially for reading (APAS 1.3)</td>
<td>Excep.</td>
</tr>
<tr>
<td></td>
<td>Identified appropriate criteria for selecting materials to include in portfolios for monitoring student progress over time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Identify successful instructional models, methods, accommodations and motivational strategies based on identifying the needs of individual students who are exceptional and/or ELL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Demonstrates the value of maintaining high expectations for all students (APAS 2.4)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Describes teachers’ ethical responsibilities using references to theory, case law, or Code of Ethics and Principles of Professional Conduct (APAS 6.1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Describes teacher responsibility to work effectively with colleagues, school personnel and parents by using specific examples (APAS 11.2)</td>
<td></td>
</tr>
<tr>
<td><strong>References, Organization, Conventions 20%</strong></td>
<td>Bibliography and references are sufficient, appropriate, accurately completed, and include ESSL resources</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Organization and written skills are accurate and appropriate to the preprofessional level</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Explains the critical thinking processes and structures used to propose solutions to the case (metacognitive monitoring)</td>
<td></td>
</tr>
</tbody>
</table>

Comments: ___________________________ Total ________

---

**Figure 1 Example Rubric for Discipline Specific Course**
Saint Leo University is providing sufficient human and financial resources to successfully launch and sustain the QEP. The QEP organization structure is presented on page 55. The Board of Trustees approves the QEP budget, and the president reviews the QEP and all other strategic initiatives at the annual strategic planning meeting.

Oversight is the responsibility of Saint Leo University’s SACS Leadership Team: Arthur F. Kirk, Jr., president; Maribeth Durst, vice president for Academic Affairs; Frank Mezzanini, vice president for Business Affairs and Chief Financial Officer; Trish Parrish, SACS liaison and associate dean of the School Education and Social Services; and Jeffrey Anderson, associate vice president for Academic Affairs.

Vice President for Academic Affairs and the Deans

The vice president for Academic Affairs will serve ex officio on the QEP advisory committee. The vice president also serves as the liaison to the university president. The QEP director and the advisory committee answer to the vice president and collaborate with the three academic deans.

QEP Director

A director, reporting to the vice president for Academic Affairs, will administer the QEP. The appointment is a 50% reduction in teaching load per semester. A QEP administrator reports to and works closely with the director to carry out the QEP. Additionally, the director is supported by the QEP advisory committee, which has worked on the development of the QEP.

The director:

- serves on the general education review team;
- oversees the QEP faculty fellows program;
- organizes and implements workshops on teaching critical thinking and core values in the continuing education centers and on the University Campus;
- communicates to the university community about the work being done through the QEP, achievements, and opportunities to participate in QEP related activities;
- monitors QEP implementation;
- collaborates with the university’s director of research and evaluation to ensure adherence to the assessment and evaluation plans;
- prepares annual formative and summative assessment reports;
- manages the QEP budget;
- maintains all QEP-related records; and
- prepares the five-year impact report for SACS.
QEP Administrator

The QEP administrator works closely with the QEP director to implement the QEP faculty fellows program and to formulate, organize, and run faculty development events across the university. This position is a half-time position with responsibility to:

- develop workshops for faculty on QEP related topics (e.g., teaching critical thinking skills, developing rubrics to assess the application of core values to decisions);
- organize and market faculty workshops in collaboration with continuing education administrators, department chairs, and program directors;
- work with undergraduate admissions, continuing education, marketing, and the office of university communication to position the QEP student learning outcomes as positive differentiators for Saint Leo University;
- create and update the QEP website;
- in collaboration with appropriate university offices, secure outside speakers and workshop facilitators for the QEP faculty fellows program and for university colloquia;
- assist in research related to teaching of critical thinking and core values; and
- assist the QEP director in the preparation and compiling of information and documents for QEP related reports and briefings.

QEP Advisory Committee

The advisory committee was formed in January 2010 to support the development and launch of the university’s QEP. The committee currently consists of six members representing assessment, faculty teaching at continuing education centers, online, and on the University Campus, and the SACS liaison (See Table 6). The committee has been active in developing the QEP and will advise, assist, and support the QEP director during implementation. Minimally, the committee will meet monthly with the QEP director and administrator.

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Department Representing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jeffrey Anderson</td>
<td>Associate Vice President</td>
<td>Assessment &amp; Institutional Research</td>
</tr>
<tr>
<td>Robert Diemer</td>
<td>Professor</td>
<td>Academic Affairs</td>
</tr>
<tr>
<td>Shannon Farris</td>
<td>Adjunct Professor</td>
<td>Academic Affairs- Adjunct</td>
</tr>
<tr>
<td>Marilyn Mallue</td>
<td>Professor</td>
<td>Continuing Education</td>
</tr>
<tr>
<td>Trish Parrish</td>
<td>Associate Dean</td>
<td>SACS Liaison</td>
</tr>
<tr>
<td>Kenneth Posner</td>
<td>Assistant Vice President</td>
<td>Student Affairs</td>
</tr>
</tbody>
</table>

During implementation, the committee will work with the director and administrator to:

- review implementation progress and develop methods for addressing challenges in the implementation,
- review feedback about QEP activities and identify ways to strengthen QEP activities,
- identify additional ways (curricular and co-curricular) to support achievement of student learning outcomes,
- participate in communication about the QEP faculty fellow program and selection of faculty fellows, and
- act as ambassadors of the QEP.

**The QEP Faculty Fellows: New Culture, New Learning**

Each new academic year there will be a new group of faculty fellows, expanding the core group committed to professional development in applying critical thinking and core values and in raising the bar on student performance with respect to the QEP learning outcomes. The QEP is structured to support two faculty fellows from each of the three schools and one faculty fellow from the library for each of the next five years. The faculty fellows will engage in a planned program, outlined in Table 7. A position description is included as an appendix.

**Table 7 QEP Faculty Fellows Development Program**

<table>
<thead>
<tr>
<th>Month</th>
<th>Work</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>July</td>
<td>Select faculty fellows who become members of the Jon C. Dalton Institute. Provide orientation materials, reference materials, and resources to faculty fellows.</td>
<td>Faculty fellows gain an understanding of the commitment they have made and become prepared to participate in the program.</td>
</tr>
<tr>
<td>August</td>
<td>Conduct an appreciative inquiry (AI) retreat of two days. During the retreat, participate in a workshop on teaching critical thinking skills with an outside resource (Douglas Bernstein, Ph.D.).</td>
<td>Learn vocabulary of critical thinking skills. Learn about effective practices for teaching critical thinking skills. Develop the ability to conduct interviews using an appreciative inquiry approach.</td>
</tr>
<tr>
<td>September</td>
<td>Begin data collection by conducting interviews (the fellows form dyads for conducting the interviews). Model the AI approach when holding conversations (interviewing) with students about critical thinking and values. Hold similar conversations with faculty members in academic departments. Using an online method, the fellows capture and summarize what they have learned from students and faculty members about current experiences and practices in using critical thinking skills and values in decision making.</td>
<td>Documentation of current practices. Identification of learning experiences that are valued by students and/or faculty and the practices that created those experiences.</td>
</tr>
<tr>
<td>October</td>
<td>Participate in a core values and decision making simulation. Discuss the potential values of using similar simulations with students. Discuss additional methods for creating experiential learning about core values and decision making. Identify ways of teaching about core values and decision making that works for the various disciplines the fellows represent. Based on the insights they gained from the simulation and the interviews they conducted, the fellows summarize what they believe is working with respect to critical thinking core values and decision making. Provide quarterly feedback about the program.</td>
<td>Develop greater knowledge about the university core values. Explore approaches to teaching about core values and decision making in the discipline.</td>
</tr>
<tr>
<td>Month</td>
<td>Work</td>
<td>Outcomes</td>
</tr>
<tr>
<td>---------</td>
<td>----------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>November</td>
<td>Working in different dyads, the faculty fellows identify one area (critical thinking, core values, use of critical thinking and values in decision making) for experimentation in their courses. Using the resources provided in July and other resources from the QEP website, the fellows develop a learning activity.</td>
<td>Develop an initial activity for implementation of QEP concepts</td>
</tr>
<tr>
<td>December</td>
<td>Skill building: this is a time to practice with the new experiment from the previous meeting and receive feedback on the learning activity from other fellows.</td>
<td>Refine initial activity and determine how to pilot into a course for spring semester</td>
</tr>
<tr>
<td>January</td>
<td>Begin personal experiments with critical thinking and valuing in their courses. Fellows provide quarterly feedback about the program.</td>
<td>Implement teaching activities that the faculty fellows have been learning about and testing.</td>
</tr>
<tr>
<td>February</td>
<td>Participate in the Jon C. Dalton Institute. Conduct evening debriefs during which the fellows identify practice implications for Saint Leo University. Update the QEP website based on the evening debriefs.</td>
<td>Continue to develop knowledge and skills needed to engage critical thinking, values, and decision making into courses.</td>
</tr>
<tr>
<td>March</td>
<td>Obtain feedback from students about the personal experiments (by March 1). Invite department chairs to a dinner to discuss what the faculty fellows have learned and experienced and how it is shaping their approach to teaching. Chairs provide their feedback about ways these activities can be refined to further enhance student learning.</td>
<td>Reassess the learning activities that they have implemented. Identify effective practices. Begin conversations with department chairs about ways A Model for a Challenging World can benefit students in the majors.</td>
</tr>
<tr>
<td>April</td>
<td>Each faculty fellow identifies a course in his/her discipline to redesign. Reach agreement with department chair on the course redesign. Fellows provide quarterly feedback about the program.</td>
<td>Revise course master syllabus.</td>
</tr>
<tr>
<td>May</td>
<td>Graduation: Review successes and learning. Identify what the graduating fellows will start doing in July to contribute to supporting mastery of the QEP learning outcomes by students. Participate in an assessment of the program using feedback gathered in October, January, and May to formulate recommendations for strengthening the program. Review student evaluation data to make recommendations for course changes and enhancements (beginning year 2).</td>
<td>Data analysis results in recommended changes to master syllabi for upcoming academic year.</td>
</tr>
<tr>
<td>June</td>
<td>QEP director and administrator refine the program and prepare for the following year.</td>
<td>Continuous improvement cycle used to close the assessment loop.</td>
</tr>
</tbody>
</table>

The Quality Enhancement Plan signals a cultural shift. It produces students more capable of facing the challenges of tomorrow's workplace and more eager to contribute to society. It also infuses faculty members with escalating expectations about the contribution they can make to the QEP student learning outcomes. Therefore, the QEP
faculty fellowship program equips faculty with the knowledge and teaching skills needed to meet those heightened expectations.
Figure 2 QEP Organizational Structure
Through its annual budgeting process, the university has made and will continue to make the QEP a priority. Table 8 presents a summary budget for the QEP (rounded to nearest one hundred dollars). A more detailed budget that separates new funding for the QEP from reallocated funding is presented in the Appendix.

Table 8 Five-Year Budget Summary

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Description</th>
<th>Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-2012</td>
<td>Revision of general education curriculum</td>
<td>$16,900</td>
</tr>
<tr>
<td></td>
<td>Assessment of student learning in general education</td>
<td>$26,700</td>
</tr>
<tr>
<td></td>
<td>Assessment of student learning in academic majors</td>
<td>$6,000</td>
</tr>
<tr>
<td></td>
<td>Implementation of an electronic assessment management system</td>
<td>$0</td>
</tr>
<tr>
<td></td>
<td>Faculty development: QEP teaching workshops for faculty</td>
<td>$8,700</td>
</tr>
<tr>
<td></td>
<td>QEP Faculty Fellowship Program</td>
<td>$66,900</td>
</tr>
<tr>
<td></td>
<td>Salaries for QEP leadership</td>
<td>$82,700</td>
</tr>
<tr>
<td></td>
<td>Communication and Marketing</td>
<td>$10,000</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$217,900</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Academic Year</th>
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<th>Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012-2013</td>
<td>Revision of general education curriculum</td>
<td>$101,200</td>
</tr>
<tr>
<td></td>
<td>Assessment of student learning in general education</td>
<td>$26,700</td>
</tr>
<tr>
<td></td>
<td>Assessment of student learning in academic majors</td>
<td>$6,000</td>
</tr>
<tr>
<td></td>
<td>Implementation of an electronic assessment management system</td>
<td>$0</td>
</tr>
<tr>
<td></td>
<td>Faculty development: QEP teaching workshops for faculty</td>
<td>$12,000</td>
</tr>
<tr>
<td></td>
<td>QEP Faculty Fellowship Program</td>
<td>$66,900</td>
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<tr>
<td></td>
<td>Salaries for QEP leadership</td>
<td>$85,200</td>
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<tr>
<td></td>
<td>Communication and Marketing</td>
<td>$5,000</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$303,000</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Description</th>
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</tr>
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<tbody>
<tr>
<td>2013-2014</td>
<td>Revision of general education curriculum</td>
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<td>Assessment of student learning in general education</td>
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</table>

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Description</th>
<th>Funding</th>
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</thead>
<tbody>
<tr>
<td>2014-2015</td>
<td>Revision of general education curriculum</td>
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<td>Assessment of student learning in general education</td>
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<td>Implementation of an electronic assessment management system</td>
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<tr>
<td></td>
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<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$303,000</strong></td>
</tr>
<tr>
<td>Academic Year</td>
<td>Description</td>
<td>Funding</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td></td>
<td>Assessment of student learning in academic majors</td>
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<tr>
<td></td>
<td>Implementation of an electronic assessment management system</td>
<td>$25,000</td>
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<tr>
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<td>Faculty development: QEP teaching workshops for faculty</td>
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<td>QEP Faculty Fellowship Program</td>
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<tr>
<td></td>
<td>Salaries for QEP leadership</td>
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<tr>
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<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$179,900.</strong></td>
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<tr>
<td>2014-2015</td>
<td>Revision of general education curriculum</td>
<td>$6,200</td>
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<tr>
<td></td>
<td>Assessment of student learning in general education</td>
<td>$20,700</td>
</tr>
<tr>
<td></td>
<td>Assessment of student learning in academic majors</td>
<td>$0</td>
</tr>
<tr>
<td></td>
<td>Implementation of an electronic assessment management system</td>
<td>$20,000</td>
</tr>
<tr>
<td></td>
<td>Faculty development: QEP teaching workshops for faculty</td>
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<tr>
<td></td>
<td>QEP Faculty Fellowship Program</td>
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<tr>
<td></td>
<td>Salaries for QEP leadership</td>
<td>$49,800</td>
</tr>
<tr>
<td></td>
<td>Communication and Marketing</td>
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</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$176,300.</strong></td>
</tr>
<tr>
<td>2015-2016</td>
<td>Revision of general education curriculum</td>
<td>$0</td>
</tr>
<tr>
<td></td>
<td>Assessment of student learning in general education</td>
<td>$20,700</td>
</tr>
<tr>
<td></td>
<td>Assessment of student learning in academic majors</td>
<td>$0</td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td></td>
<td>Communication and Marketing</td>
<td>$2,500</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$170,700.</strong></td>
</tr>
</tbody>
</table>
The Saint Leo University QEP is supported by a comprehensive evaluation plan that assesses each of the student learning outcomes. The evaluation plan describes:

- methods that will be used to assess each student learning outcome;
- levels of performance that indicate satisfactory achievement;
- key actions needed to achieve the desired outcomes; and
- descriptions of how the results will be used to strengthen the QEP and improve student mastery of learning outcomes.

In the January 2011 University Senate meeting, the senate charged the Assessment, Research, and Planning Committee with general oversight of the QEP evaluation. The director of research and evaluation for Saint Leo University, in collaboration the associate vice president for Academic Affairs, formulated the evaluation plan and will ensure effective implementation of the evaluation.

The QEP director and administrator work with the director of research and evaluation to summarize the evaluation findings at the end of each semester and annually. The QEP director communicates the findings and facilitates reviews of the results with the QEP advisory committee, the Assessment, Research, and Planning Committee, and the QEP faculty fellows. These review meetings inform recommendations for how to improve the program.

The plan to evaluate student learning outcomes is presented on pages 59 to 63. As required by SACS, Saint Leo University will provide a summative assessment at the five-year point to evaluate overall achievement of student learning outcomes.
| SLO 1.1 Students will demonstrate knowledge of critical thinking skills |
|---|---|---|
| **Assessment Methods and Measurable Outcomes** | **QEP Actions to Achieve Outcomes** | **Use of Results** |
| In course knowledge-level assessments of vocabulary and basic critical thinking processes are implemented. | **General Education** For the critical thinking infused courses, develop knowledge tests that assess mastery of critical thinking vocabulary and processes. | After in-course grading, student responses will be analyzed by the director of research and evaluation to identify the areas in which student test scores indicate a failure to achieve the SLO 1.1. The faculty members designing the courses and QEP faculty fellows will review the results of the item analysis with the director of research and evaluation. They will identify changes to the course(s) and or teaching methods that could result in greater student learning and mastery of the material. Annually, the faculty members will decide on refinements to the course(s). |
| At the end of a course module in which the QEP faculty fellow provided instruction on critical thinking, student assignment provides feedback to instructor on areas of understanding and areas in need of clarification. | **Discipline-specific courses** QEP faculty fellows develop instruction in critical thinking that they incorporate into a course. | The faculty fellow reviews the student feedback, provides follow-up instruction on points about which students requested clarification. As a group, the fellows review the feedback that they received and identify what worked and ways to strengthen their teaching of critical thinking skills. Annually, a summary of their conclusions is posted on the QEP website. |
| For those courses that are redesigned to help students develop knowledge of critical thinking skills, in course knowledge-level assessments of vocabulary and basic critical thinking processes are implemented. | **Discipline-specific courses** Each QEP faculty fellow identifies a course to redesign. The redesign of the course will result in changes to the master syllabus. This initiates changes to the teaching of that course throughout the university. | After in-course grading by the instructor, student responses will be analyzed by the director of research and evaluation to identify the areas in which student test scores indicate a failure to achieve the SLO 1.1. |
### SLO 1.1 Students will demonstrate knowledge of critical thinking skills

<table>
<thead>
<tr>
<th>Assessment Methods and Measurable Outcomes</th>
<th>QEP Actions to Achieve Outcomes</th>
<th>Use of Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least 75% of students will demonstrate satisfactory knowledge of critical thinking skills by scoring at least 80%.</td>
<td></td>
<td>The QEP faculty fellows and the curriculum designers will review the results of the item analysis with the director of research and evaluation. They will identify changes to the course(s) and or teaching methods that could result in greater student learning and mastery of the material.</td>
</tr>
</tbody>
</table>

### SLO 1.2 Students will demonstrate critical thinking skills in general education

<table>
<thead>
<tr>
<th>Assessment Methods and Measurable Outcomes</th>
<th>QEP Actions to Achieve Outcomes</th>
<th>Use of Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>The course instructors use a standardized rubric to assess student performance on the embedded assessments.</td>
<td>Develop embedded assessments that provide students the opportunity to show how they can use critical thinking skills. The embedded assessment for a course is used in all classes of that course.</td>
<td>After in-course grading of the assessment, the director of research and evaluation will oversee the compilation and review of student performance on the assessments from across the university. Annually, the faculty members designing the courses and the QEP faculty fellows will review student performance on the assessments and identify the student learning areas that require strengthening.</td>
</tr>
<tr>
<td>At least 75% of students will achieve ratings of proficient on the embedded assessments.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>As part of the general education curriculum, students will take the ETS® Proficiency Profile. The critical thinking items test the student’s ability to evaluate hypotheses for consistency, determine the relevance of information, and recognize flaws and inconsistencies in arguments</td>
<td>Used as a summative measure to demonstrate success of SLO 1 for the first time in college, traditional students.</td>
<td></td>
</tr>
</tbody>
</table>
SLO 1.2  Students will demonstrate critical thinking skills in general education

<table>
<thead>
<tr>
<th>Assessment Methods and Measurable Outcomes</th>
<th>QEP Actions to Achieve Outcomes</th>
<th>Use of Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>education curriculum will demonstrate improvement from their incoming freshman scores in critical thinking.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SLO 1.3  Students will apply critical thinking skills atin courses that are redesigned by the QEP Faculty Fellows

<table>
<thead>
<tr>
<th>Assessment Methods and Measurable Outcomes</th>
<th>QEP Actions to Achieve Outcomes</th>
<th>Use of Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>For those courses that are redesigned to help students apply knowledge, techniques, and rules of critical thinking, application assignments are developed to test the extent to which students correctly demonstrate critical thinking skills. The application assignments are assessed using a standardized rubric. At least 75% of students will demonstrate proficient use of critical thinking skills in the application assignments.</td>
<td>Discipline-specific courses Each QEP faculty fellow identifies a course to redesign. The redesign of these courses will result in changes to the master syllabi thus initiating changes to the teaching of those courses throughout the university.</td>
<td>The director of research and evaluation will oversee the compilation and review of student performance on the assessments from across the university. Annually, the faculty members designing the courses and the QEP faculty fellows will review student performance on the assessments and identify the student learning areas that require strengthening</td>
</tr>
</tbody>
</table>

SLO 2.1  Students will show knowledge of the university core values and their definitions

<table>
<thead>
<tr>
<th>Assessment Methods and Measurable Outcomes</th>
<th>QEP Actions to Achieve Outcomes</th>
<th>Use of Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge-level assessments of the core values are implemented.</td>
<td>General Education Develop knowledge assessments for each general education course that assess student</td>
<td>After in-course grading by the instructor, student responses will be analyzed by the director of research and evaluation to identify the areas in</td>
</tr>
</tbody>
</table>
### SLO 2.1  Students will show knowledge of the university core values and their definitions

<table>
<thead>
<tr>
<th>Assessment Methods and Measurable Outcomes</th>
<th>QEP Actions to Achieve Outcomes</th>
<th>Use of Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least 80% of students will demonstrate satisfactory knowledge of the core values by scoring at least 80%.</td>
<td>comprehension of the core values relevant to the course.</td>
<td>which student test scores indicate a failure to achieve the SLO 2.1.</td>
</tr>
</tbody>
</table>

### SLO 2.2  Students will apply core values to situations covered as part of the general education curriculum and in their disciplines

<table>
<thead>
<tr>
<th>Assessment Methods and Measurable Outcomes</th>
<th>QEP Actions to Achieve Outcomes</th>
<th>Use of Results</th>
</tr>
</thead>
</table>
| Students will be assessed at the application-level in all general education courses. The course instructors use a standardized rubric to assess student performance on the embedded assessments. At least 75% of students will achieve ratings of proficient on the embedded assessments. | General Education  
Build application exercises into the new general education courses that require students to apply one or more of the core values to content covered in the general education course.  
Develop embedded assessments that provide students the opportunity to show how they can make use of one or more of the university core values.  
The assessment for a course is used in all classes of that course. | After in-course grading, student responses will be analyzed by the director of research and evaluation to identify the areas in which student test scores indicate a failure to achieve the SLO 2.2.  
Annually, the faculty members designing the courses and the QEP faculty fellows will review student performance on the assessments and identify the student learning areas that require strengthening. |

### SLO 3.1  Students will link critical thinking and values in decision making

<table>
<thead>
<tr>
<th>Assessment Methods and Measurable Outcomes</th>
<th>QEP Actions to Achieve Outcomes</th>
<th>Use of Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students will use critical thinking and core values</td>
<td>Develop an embedded assessment with a</td>
<td>The results will be analyzed by the director of</td>
</tr>
</tbody>
</table>
to support decision making in response to an embedded assessment given in an early general education course and repeated in a late general education course.

At least 80% of students will demonstrate an overall increase in scores in the second course.

standard rubric; include the embedded assessment in two general education courses. The assessments will be scored by blind reviewers without the level of the course identified.

assessment and evaluation to determine average scores for students in the early general education courses and average scores for the students in the late general education course. Annually, the faculty members designing the courses and QEP faculty fellows will review results to determine overall success of implementation and to determine if the use of critical thinking and core values in decision making needs to be increased in coursework.

<table>
<thead>
<tr>
<th>SLO 3.2 Students will articulate a rationale for and defend decisions using a critical thinking values-based model</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>QEP Actions to Achieve Outcomes</strong></td>
</tr>
<tr>
<td>Students will write a reflection explaining the process used to make decisions in the sophomore level general education course embedded assessment on using critical thinking and values in decision making. At least 75% of students will achieve ratings of proficient.</td>
</tr>
</tbody>
</table>
IMPLEMENTATION MONITORING AND EVALUATION

Achievement of student learning outcomes through the QEP depends on effective implementation of this initiative. Saint Leo University uses two processes to ensure effective implementation and the provision of timely, actionable feedback to those with primary responsibility for the QEP. Because the QEP is a university strategic initiative, the president has engaged the Bradley Group to develop a detailed action plan and to provide monthly updates on progress against the plan. Saint Leo University uses the Bradley Group to monitor the implementation of all strategic initiatives, and the QEP is no exception.

The QEP is also supported by an implementation evaluation. The implementation evaluation collects feedback from key stakeholders about how well major components of the plan are being carried out and solicits their ideas about areas for improvement.

Implementation evaluation focuses on:

- student perceptions of the courses that have been redesigned (at the end of each semester);
- QEP faculty fellows feedback about the structured learning experiences and their learning (quarterly);
- feedback from participants about the value of the faculty development workshops

The plan to evaluate implementation is presented on pages 65 to 67.
### Implementation Question:
To what extent do the redesigned courses in general education and the academic disciplines support the achievement of the QEP student learning outcomes?

<table>
<thead>
<tr>
<th>Assessment Methods and Measurable Outcomes</th>
<th>QEP Actions to Achieve Outcomes</th>
<th>Use of Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expert review of the courses by curriculum designers to assess the extent to which critical thinking skills are covered in the new courses.</td>
<td><strong>General Education</strong>&lt;br&gt;Develop critical thinking infused courses as part of the general education curriculum.</td>
<td>Curriculum designers and the faculty members designing the courses collaborate to address omissions identified by the curriculum designers.</td>
</tr>
<tr>
<td>Critical thinking skills are introduced in two to three general education courses.</td>
<td><strong>General Education</strong>&lt;br&gt;Build application exercises into the new, critical thinking infused, general education courses.</td>
<td>Curriculum designers, teaching faculty, and faculty fellows collaborate to address omissions identified by the curriculum designers.</td>
</tr>
<tr>
<td>Expert review of the courses by curriculum designers to ensure that the courses provide instruction, assignments, and assessments that require students to use critical thinking skills.</td>
<td><strong>General Education</strong>&lt;br&gt;All general education courses highlight one or more of the university core values and explain the connection of the core value to the course.</td>
<td>Curriculum designers and the faculty members designing the courses collaborate to address omissions identified by the curriculum designers.</td>
</tr>
<tr>
<td>Application of critical thinking skills is included in at least three general education courses.</td>
<td><strong>General Education</strong>&lt;br&gt;Build application exercises into the new general education courses that require students to apply one or more of the core values to content covered in the general education course.</td>
<td>Curriculum designers and the faculty members designing the courses collaborate to address omissions identified by the curriculum designers.</td>
</tr>
<tr>
<td>Expert review of the courses by curriculum designers to assess the extent to which the university core values are covered in the new courses.</td>
<td><strong>General Education</strong>&lt;br&gt;To what extent do the redesigned courses in general education and the academic disciplines support the achievement of the QEP student learning outcomes?</td>
<td>Curriculum designers and the faculty members designing the courses collaborate to address omissions identified by the curriculum designers.</td>
</tr>
<tr>
<td>Each core value must be a part of at least two general education courses.</td>
<td><strong>General Education</strong>&lt;br&gt;Build application exercises into the new general education courses that require students to apply one or more of the core values to content covered in the general education course.</td>
<td>Curriculum designers and the faculty members designing the courses collaborate to address omissions identified by the curriculum designers.</td>
</tr>
<tr>
<td>Application of the core values is included in all general education courses.</td>
<td><strong>General Education</strong>&lt;br&gt;Build application exercises into the new general education courses that require students to apply one or more of the core values to content covered in the general education course.</td>
<td>Curriculum designers and the faculty members designing the courses collaborate to address omissions identified by the curriculum designers.</td>
</tr>
</tbody>
</table>
### Implementation Question

To what extent do students perceive that they are learning and using critical thinking skills in the general education courses and in the redesigned courses in the academic disciplines?

### Assessment Methods and Measurable Outcomes

- **Student feedback on end of course evaluations** confirms that the students learned the basic concepts and terms of critical thinking.
- On average, students agree that they learned the basic concepts and terms of critical thinking.

### QEP Actions

<table>
<thead>
<tr>
<th>General Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implement courses infused with critical thinking skills.</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Discipline-specific courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>QEP faculty fellows develop instruction in critical thinking that they incorporate into one of their courses.</td>
</tr>
</tbody>
</table>

### Use of Results

- The Office of Assessment and Institutional Research analyzes the student responses. Any of the courses in which the average score is below a 4.0 (on a 5.0) scale will be brought to the attention of the faculty members who designed the courses.
- Annually, the faculty members designing the courses, the curriculum designers, and the QEP faculty fellows will review the courses with scores below 4.0.

Student responses on eight critical thinking items on the National Survey of Student Engagement (NSSE) will be used to assess student perceptions of the extent to which they use critical thinking skills as part of their coursework at Saint Leo University.

The eight items are 2b, 2c, 2d, 2e, 6d, 63, 113, and 11m.

- The percent of second-semester freshmen responding “very much” to these items will be significantly greater in the 2014 administration than in the 2011 administration.

The Office of Assessment and Institutional Research administers the NSSE. The results will be used to determine if a sufficient number of courses are infused with critical thinking. No change from 2011 indicates that critical thinking courses are needed.
### Implementation Question
To what extent do students perceive that they are learning about the core values and learning to apply the core values in the general education courses?

<table>
<thead>
<tr>
<th>Assessment Methods and Measurable Outcomes</th>
<th>QEP Actions</th>
<th>Use of Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>The course evaluations for general education courses ask students to identify the core values that were introduced and emphasized as part of the course.</td>
<td><strong>General Education</strong> Implement courses that incorporate two of the core values into the course.</td>
<td>The Office of Assessment and Institutional Research analyzes the student responses. At the end of the semester, the values that students identified as being emphasized in each course are presented to the faculty members designing the courses, the curriculum designers, and the QEP faculty fellows. Annually, gaps in coverage are discussed and changes to the courses are agreed upon.</td>
</tr>
<tr>
<td>For each class of a course, at least 80% of respondents in each class identify the core values that are designed into the course.</td>
<td></td>
<td></td>
</tr>
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</table>

### Implementation Question:
What about the structured learning experiences do the QEP faculty fellows value and what suggestions do they have for improving the faculty fellows program?

<table>
<thead>
<tr>
<th>Assessment Methods and Measurable Outcomes</th>
<th>QEP Actions to Achieve Outcomes</th>
<th>Use of Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>At the end of each structured learning experience, the faculty fellows conduct a plus/delta review in which they identify what worked well and they identify desired improvements for future events.</td>
<td>To ensure faculty fellows program is implemented as designed to meet faculty learning needs.</td>
<td>With the QEP director and administrator, the QEP advisory committee reviews the feedback from the faculty fellows. The group identifies substantive changes that would strengthen the program and it identifies ways to improve how activities are being implemented.</td>
</tr>
<tr>
<td>Quarterly, the faculty fellows complete written questionnaires about the program. The questionnaires include closed-ended and open-ended questions about the program and about ways to strengthen the program.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
REFERENCES


Dalton, J. C., & Crosby, P. C. (2010). How we teach character in college: A retrospective on some recent higher education initiatives that promote moral and


Engleman, D., & Geenen, P. R. (2010, February). Building on student strengths to develop professional responsibility across the curriculum. Presented at Jon C. Dalton Institute on College Student Values, Florida State University.


Graham, S. (2010, February). From emotion to values and back again: The reciprocity of emotion and valuing: How to facilitate student awareness of their valuing processes.
Presented at Jon C. Dalton Institute on College Student Values, Florida State University.


ACKNOWLEDGEMENTS

The creation of the Quality Enhancement Plan required the contributions of many members of the Saint Leo University community and it is important to acknowledge their contributions to this project. Jeffrey M. Anderson, associate vice president for Academic Affairs, served as the project leader throughout the creation of the QEP and was the lead author of this text. Marilyn Mallue, professor of Psychology, took the lead in creating the literature review for the QEP and then spent countless hours working with other team members to enhance their understanding of the literature and to share ways in which the literature should and could inform the development of the plan.

Robert Diemer, professor of Criminal Justice, served on the Compliance Certification leadership team in addition to serving on the QEP advisory committee. His leadership with faculty and students has been evident throughout the process. Shannon Farris, adjunct instructor of Psychology, has played an integral role in the development and finalization of the Quality Enhancement Plan.

Members of the SACS Key Result Area made early contributions to the concept and organization of the Quality Enhancement Plan. Of particular note, Laura Blasi, Molly-Dodd Adams, Beth Carter and Cece Martin developed the initial concept paper that provided the basis for discussions and focus groups around the Quality Enhancement Plan.

Focus groups for the QEP were led by Jeffrey Anderson, Laura Blasi, Joseph Paquette, and Trish Parrish. Susan Shoulet served as the editor for this project.
APPENDICES

QEP Detailed Budget (2011-2012 through 2015-2016)

QEP Faculty Fellow Position Description
Table 9 Total Funding for QEP

<table>
<thead>
<tr>
<th>TOTAL QEP FUNDING</th>
<th>$1,047,931.25</th>
<th>$217,943.50</th>
<th>$303,035.13</th>
<th>$179,947.26</th>
<th>$176,307.37</th>
<th>$170,698.00</th>
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</thead>
<tbody>
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Revision of the General Education Curriculum

<table>
<thead>
<tr>
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<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
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<td>Program Review Project Budget</td>
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Redesign of the General Education Courses

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<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
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</thead>
<tbody>
<tr>
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<td>Cost for faculty SME</td>
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Assessment of Student Learning in General Education

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<th>Year 1</th>
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<th>Year 4</th>
<th>Year 5</th>
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</thead>
<tbody>
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<td>$20,700.00</td>
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<tr>
<td>Design of embedded assessments with rubrics for knowledge and application of university core values</td>
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Assessment of Student Learning in the Majors

<table>
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<th>Year 4</th>
<th>Year 5</th>
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<tbody>
<tr>
<td>Design of embedded assessments with rubrics for critical thinking</td>
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<td>$3,000.00</td>
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<tr>
<td>Design of embedded assessments with rubrics for knowledge and application of university core values</td>
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<tr>
<td>TOTAL QEP FUNDING</td>
<td>$1,047,931.25</td>
<td>$217,943.50</td>
<td>$303,035.13</td>
<td>$179,947.26</td>
<td>$176,307.37</td>
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<tr>
<td>Year 1</td>
<td>Year 2</td>
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<td>Year 4</td>
<td>Year 5</td>
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<td>Assessment Management System</td>
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<td>QEP Teaching Workshops for Faculty (at SLU teaching locations)</td>
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<td>Number of events</td>
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<td>QEP Faculty Fellowship Program</td>
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<td>Seven QEP Faculty Fellows; Stipend</td>
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<td>$ 30,100.00</td>
<td>$ 30,100.00</td>
<td>$ 30,100.00</td>
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<td>$ 25,800.00</td>
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<td>Conferences</td>
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<td>$ 6,000.00</td>
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<td>Travel</td>
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<td>$ 1,000.00</td>
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<td>$ 1,000.00</td>
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<td>QEP Leadership</td>
<td></td>
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<td>QEP Director Salary</td>
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<td>$ 30,951.49</td>
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<td>$ 6,829.54</td>
<td>$ 7,034.43</td>
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<tr>
<td>Admin (Fringe)</td>
<td>$ 2,187.50</td>
<td>$ 2,253.13</td>
<td>$ 2,320.72</td>
<td>$ 2,390.34</td>
<td>$ 2,462.05</td>
</tr>
<tr>
<td>Communication and Marketing</td>
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</table>
### Table 10 Reallocated Funds to Support QEP

<table>
<thead>
<tr>
<th>Five Year Total for Reallocated Funding:</th>
<th>$ 452,856.83</th>
<th>$ 129,193.50</th>
<th>$ 156,465.63</th>
<th>$ 55,461.34</th>
<th>$ 55,729.88</th>
<th>$ 56,006.48</th>
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<tbody>
<tr>
<td>Year 1</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Year 2</td>
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<td>Year 3</td>
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<td>Year 5</td>
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<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

- **Revision of the General Education Curriculum**
  - AACU General Education Institute
  - External reviewer
  - Travel for reviewer
  - Program Review Project Budget

- **Redesign of the General Education Courses**
  - N of courses per year: 0, 15, 0, 0
  - Cost per course: $5,000
  - Instructional Design: $-$, $75,000.00, $-$, $-$, $-$
  - Faculty Stipends for Course Revisions: $-$, $26,250.00, $-$, $-$
  - Cost for faculty SME: $1,750

- **Assessment of Student Learning in General Education**
  - ETS incoming & junior: $20,700.00, $20,700.00, $20,700.00, $20,700.00, $20,700.00
  - Design of embedded assessments with rubrics for critical thinking
  - Design of embedded assessments with rubrics for knowledge and application of university core values

- **Assessment of Student Learning in the Majors**
## Five Year Total for Reallocated Funding

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>$452,856.83</td>
<td>$129,193.50</td>
<td>$156,465.63</td>
<td>$55,461.34</td>
<td>$55,729.88</td>
<td>$56,006.48</td>
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</tbody>
</table>

### Design of embedded assessments with rubrics for critical thinking

### Design of embedded assessments with rubrics for knowledge and application of university core values

### QEP Teaching Workshops for Faculty (at SLU teaching locations)

<table>
<thead>
<tr>
<th>Number of events (at least)</th>
<th>6</th>
<th>10</th>
<th>10</th>
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<tbody>
<tr>
<td>Development of workshops &amp; materials</td>
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</table>

### QEP Faculty Fellowship Program

- Seven QEP Faculty Fellows; Stipend
- Payment for course releases: $25,800.00, $25,800.00, $25,800.00, $25,800.00, $25,800.00
- Conferences
- Travel
- Annual Retreat
- Honorarium for External Speakers

### QEP Leadership

- QEP Salaries: $55,000.00
- Fringe: $19,250.00
- Administrative Support (10 hrs/wk): $6,250.00, $6,437.50, $6,630.63, $6,829.54, $7,034.43

80
### Five Year Total for Reallocated Funding:

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<th>Year 2</th>
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<th>Year 5</th>
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<tr>
<td>Admin (Fringe)</td>
<td>$ 2,187.50</td>
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<td>$ 2,320.72</td>
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Total: $ 452,856.83
### Table 11 Total Additional Funding for QEP

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<td>Year 4</td>
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<tr>
<td>AACU General Education Institute</td>
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<tr>
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<tr>
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<tr>
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<tr>
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</tr>
<tr>
<td>Faculty Stipends for Course Revisions</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost for faculty SME</td>
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</table>
## Five Year Total for Additional Funding:

<table>
<thead>
<tr>
<th></th>
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<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ 88,756.00</td>
<td>$ 146,592.50</td>
<td>$ 124,495.91</td>
<td>$ 120,583.49</td>
<td>$ 114,693.51</td>
</tr>
</tbody>
</table>

### Assessment of Student Learning in General Education

- Design of embedded assessments with rubrics for critical thinking
  - Year 1: $3,000.00
  - Year 2: $3,000.00

### Assessment of Student Learning in the Majors

- Design of embedded assessments with rubrics for critical thinking
  - Year 1: $3,000.00
  - Year 2: $3,000.00

- Design of embedded assessments with rubrics for knowledge and application of university core values
  - Year 1: $3,000.00
  - Year 2: $3,000.00

### Assessment Management System

- Year 1: $25,000.00
- Year 2: $20,000.00
- Year 3: $20,000.00

### QEP Teaching Workshops for Faculty (at SLU teaching locations)

- Number of events
  - Year 1: 6
  - Year 2: 10
  - Year 3: 10
  - Year 4: 6
  - Year 5: 4
### Five Year Total for Additional Funding:

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>$595,121.42</td>
<td>$88,756.00</td>
<td>$146,592.50</td>
<td>$124,495.91</td>
<td>$120,583.49</td>
<td>$114,693.51</td>
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- **Development of workshops & materials**: $1,500.00 (Year 1), $1,500.00 (Year 2), $1,500.00 (Year 3), $1,500.00 (Year 4), $1,500.00 (Year 5)
- **Meeting costs**: 200, $1,200.00 (Year 2), $2,000.00 (Year 3), $2,000.00 (Year 4), $1,200.00 (Year 5), $800.00 (Year 5)
- **Travel**: 1000, $6,000.00 (Year 1), $10,000.00 (Year 2), $10,000.00 (Year 3), $6,000.00 (Year 4), $4,000.00 (Year 5)

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### QEP Faculty Fellowship Program

- **Seven QEP Faculty Fellows; Stipend**: $30,100.00 (Year 1), $30,100.00 (Year 2), $30,100.00 (Year 3), $30,100.00 (Year 4), $30,100.00 (Year 5)

### Payment for course releases

- **Conferences**: $6,000.00 (Year 1), $6,000.00 (Year 2), $6,000.00 (Year 3), $6,000.00 (Year 4), $6,000.00 (Year 5)
- **Travel**: $3,000.00 (Year 1), $3,000.00 (Year 2), $6,000.00 (Year 3), $6,000.00 (Year 4), $6,000.00 (Year 5)
- **Annual Retreat**: $1,000.00 (Year 1), $1,000.00 (Year 2), $1,000.00 (Year 3), $1,000.00 (Year 4), $1,000.00 (Year 5)
- **Honorarium for External Speakers**: $1,000.00 (Year 1), $1,000.00 (Year 2), $1,000.00 (Year 3), $1,000.00 (Year 4), $1,000.00 (Year 5)

### QEP Leadership

- **QEP Salary**: $56,650.00 (Year 1), $29,174.75 (Year 2), $30,049.99 (Year 3), $30,951.49 (Year 4)
- **QEP Fringe**: $19,827.50 (Year 1), $10,211.16 (Year 2), $10,517.50 (Year 3), $10,833.02 (Year 4)

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**Administrative Support (10 hrs/wk)**

- **Admin (Fringe)**

**Communication and Marketing**

- $10,000.00 (Year 1), $5,000.00 (Year 2), $2,500.00 (Year 3), $2,500.00 (Year 4), $2,500.00 (Year 5)
Table 12 QEP Faculty Fellow Position Description

<table>
<thead>
<tr>
<th>TITLE:</th>
<th>QEP Faculty Fellow</th>
<th>DEPARTMENT:</th>
<th>Academic Affairs</th>
</tr>
</thead>
<tbody>
<tr>
<td>REPORTS TO:</td>
<td>QEP Director</td>
<td>COMPENSATION:</td>
<td>$4,300.00</td>
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</tbody>
</table>

**PURPOSE:** This is a part time, faculty rank position responsible to the QEP Director. The role of this position is to provide guidance, leadership, coaching and to act as a resource for the implementation of current Quality Enhancement Plans (QEP). The fellow will integrate the critical thinking skills and core values into their curriculum and foster a culture of active student learning.

**SCOPE OF RESPONSIBILITY:**

Faculty Fellows will develop knowledge and skills in critical thinking, core values, and the teaching of critical thinking and core values. They will infuse critical thinking skills and core values into their courses. They will assist with the general education redesign, modifying courses that they teach, and assist other faculty members to ensure that critical thinking skills and core values are intergraded into the student learning experience.

Specific duties include but are not limited to the following:

- Participate in a yearlong faculty fellow training program.
- Participate in individual and group learning activities throughout the year to further develop their knowledge and skills and to foster conversations about the relationship of critical thinking and values to decision making.
- Identify strengths of the curriculum with respect to the application of critical thinking and values to decision making.
- Test innovations and techniques in teaching critical thinking skills and values development in courses they teach.
- Offer workshops on teaching critical thinking skills and core values at the faculty development events.
- Develop curriculum that infuses critical thinking and valued based learning.
- Work closely with course designers for design and revision of online courses.
- Work with their department chair or program director on course re-development.
- Assist with communication to the faculty about the QEP.
- Collaborate with other faculty members on critical thinking and values based learning.

**QUALIFICATIONS:** The candidates will be volunteers who are full-time faculty members and/or annual contract adjunct faculty members. The faculty fellows must be interested in strengthening their teaching skills and committed to integrating critical thinking skills and core values into their courses.

*The statements contained herein reflect general details necessary to describe the principle functions of this job, the level of knowledge and skill typically required, and the scope of responsibility; however, should not be considered an all-inclusive listing of the job requirements.*

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