ABILENE CHRISTIAN UNIVERSITY

Pursuit: A Journey of Research and Creative Expression



February 2011

A Quality Enhancement Plan developed as part of the University's SACSCOC 2011 Reaffirmation







Pursuit: A Journey of Research and Creative Expression

Research Literacy Initiative



A Quality Enhancement Plan ■ Prepared for the Southern Association of Colleges and Schools Commission on Colleges

Abilene Christian University
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1. Executive Summary

Pursuit: A Journey of Research and Creative Expression is the Quality Enhancement Plan (QEP) selected and developed to provide Abilene Christian University undergraduates with the knowledge, skills, behaviors, and values to attain research literacy. These skills are developed and utilized in the creation of a research or creative product and then disseminated in a public environment, making a distinct awareness of and commitment to the body of knowledge in the discipline.

Institutional Support

The QEP Research Literacy Initiative begins with a broad-based, far-sighted, vision for transformative learning experiences for students.

- The 21st Century Vision and the Mission of the University call for distinctive and innovative programs. These significant, visionary documents come from a consensus of key constituent groups of the University.
- Based on this call coupled with a careful and extensive review of research and best practices and the addition of a new Core Curriculum (CORE), the University is proposing its QEP, implementing curricular innovations designed to enhancing student learning.
- Implementation of the QEP provides for
 - focused curricular experiences through CORE classes, enhancing the research readiness of students;
 - expansion of opportunities for research and creative projects through an intentional focus on faculty mentoring and through the allocation of financial resources for students and faculty to collaborate on research, scholarship and creative work, and settings for dissemination of research, scholarly and creative work; and
 - professional development of faculty to assist in the creation and implementation of research-based courses.

Goals and Plan for Research Literacy Initiative

The building of a community of research, scholarship, and creative expression is the overarching purpose of ACU's *Pursuit* QEP. The plan can be summarized by the three goals: *Explore, Create, and Express*.

- In the new Core Curriculum, students *Explore* and master information literacy
 as they think critically to write evaluative papers and articulate the nature and
 impact of significant global issues in research artifacts.
- Students *Create* a product while learning and practicing the skills needed to carry out a research or creative project. Opportunities are given to students to work with faculty mentors to carry out research or complete a creative activity.
- Students *Express* the results of their research or creative activity. Since the
 goal of research is to make public one's work for a context of critique,
 extension, and correction, students must learn to express their results in both
 written and oral communications (Boyer, 1998).

Pursuit provides students an exciting way to engage in their discipline both inside and outside the classroom, leading to a deeper understanding of the academic area they have chosen, satisfying their thirst for discovery, and providing an outlet for their creativity. As we embark on the Pursuit on the Journey of Research and Creative Expression, we are committed to equipping students with tools to become life-long learners in an ever-changing society.

2. Introduction to Abilene Christian University

Institutional Context

Abilene Christian University was founded in 1906 to provide Christian education in students in West Texas. More than 100 years later, ACU is among the premier universities for the education of Christian global leaders. In the Fall 2010, ACU enrolled more than 4700 students from 50 states and territories and 42 foreign countries.

The University was established by members of the Churches of Christ, a network of independently governed congregations worldwide, and welcomes students of character and ability who value the University's Christian environment. The Christian

commitment is a vital part of the students' experiences through daily chapel, annual lectures and conference on Christian issues (*Summit*), spring break mission trips, required Bible courses in the undergraduate curriculum, and commitment to faith for all faculty.



Abilene Christian

University is a selective, private, comprehensive university with more than 3,800 undergraduate students, with an additional 900 graduate students. The students are served by more than 230 full-time faculty members who focus on high-quality teaching, scholarship and service. Ninety-seven percent of full-time tenure-track faculty hold terminal degrees. The student/faculty ratio is 16:1. Faculty and administrators are actively involved as leaders and presenters in national professional associations. ACU is an active member of the Council for Christian Colleges and Universities and the National Network of Church-related colleges and universities: Lilly Fellows Program.

Students may choose from among 67 baccalaureate majors that include more than 125 areas of study, 25 master's degree programs and one doctoral program. The University has made a significant commitment to technology through its Mobile Learning Initiative providing all full-time undergraduate students with an iPhone or iPod Touch. Thanks to a \$1.8 million award from AT&T, a Learning Studio is being built where faculty, staff, and students will pursue technological innovation inside and outside the classroom. Service learning is important and a majority of students actively volunteer in the local community. Opportunities for study abroad abound with permanent university centers in Oxford, Great Britain and Montevideo, Uruguay along with a third site under development in Leipzig, Germany.

The University is located in Abilene, Texas; an All-America City of 120,000 located about 180 miles west of the Dallas-Ft. Worth metroplex. The city offers a variety of social, religious, athletic and cultural activities. Abilene is a safe, enjoyable place to live, including most of the amenities of a major metropolitan area.

A Time of Change

After 19 years of serving the University as president, Dr. Royce Money retired in



2010 and Dr. Phil Schubert was appointed by the Board of Trustees to advance the University's mission. Within the same year, new deans of the College of Arts and Sciences, Honors College, and Graduate School were chosen. A new Provost was named in 2009.

The new leadership brings with it a bold vision for the coming century. Building on the foundations of the university's Christian heritage and history of excellence in higher education, the 21st Century Vision focuses upon building a Christ-centered community that produces and nurtures leaders who think critically, globally and missionally. The Vision calls for distinctive and innovative programs that expand ACU's reach nationally and internationally (see 21st Century Vision or http://www.acu.edu/aboutacu/vision.html for information).

Among the first responses to the 21st Century Vision is the restructuring of the core curriculum. After nearly five years of study, a curricular plan was chosen that emphasizes the value of liberal education in providing all majors with durable and transferable skills. The plan includes common curricular experiences, intellectual and spiritual development, integrative thinking, increasingly challenging learning opportunities, and enhanced critical and global thinking.

From these fundamentals, new student learning outcomes were developed. An ACU graduate, therefore, is expected to demonstrate the following:

- 1. Strong analytical and quantitative skills;
- 2. Understanding and hands-on experiences with inquiry practices of disciplines that explore the natural, socio-cultural, aesthetic, and theological realms;
- 3. Intercultural knowledge, integrative thinking and collaborative problem-solving skills:
- 4. Proactive sense of responsibility for individual, civic, and social choices; and
- 5. Habits of mind that foster integrative thinking and the ability to transfer skills and knowledge from one setting to another.

The Core Curriculum includes a 14-hour Bible requirement; mastery of a foreign language; a two-tiered Cultural Competency requirement; and revised English, Social Science, and Humanities requirements. Three components of the Core Curriculum form the foundation for the development and implementation of the Quality Enhancement Plan (QEP) for undergraduate research:

- 1. CORE 110 The Question of Truth a three-hour integrative and interdisciplinary course introducing students to challenging issues and promoting inquiry and engagement.
- 2. The Integrated Core three 3-credit hour courses that create the habit of integrative thinking, stress the interconnectedness of knowledge, and foster critical thinking.
- 3. Senior Year Capstone Experiences course(s) within students' major fields of study that challenge students to critically analyze, reflect, and write about their disciplines from a Christian worldview.

Imbedded in the core curriculum are increasingly complex tools for praxis of research culminating in a capstone project or paper. Inspired by the *21*st Century Vision and building upon the core curriculum, the QEP proposes to implement a campus-wide program described as Exploration, Creation, and Expression.



3. Process Used to Develop the QEP

ACU's SACSCOC Leadership Team provides direction and oversight for the reaffirmation process and the development of the Quality Enhancement Plan (QEP). The team is composed of the President of the University, the Provost, the SACSCOC liaison, Director of Institutional Effectiveness, Director of SACSCOC Reaffirmation, and the Chair of QEP Team. The Leadership Team provides the oversight for the development of the Quality Enhancement Plan but charged the QEP Topic Selection Team with the task of soliciting input from University constituents for selection of the topic for focus.

Selection of the Topic

In spring 2009, the QEP Topic Selection Committee was charged with generating 2-4 topics appropriate to become the QEP for the University. The topic was chosen in response to existing empirical assessment of student learning and had to satisfy four additional criteria: (1) a broad basis of institutional support, (2) capacity to make a significant (even transforming) change in the quality of student learning, (3) availability of appropriate human and financial resources, and (4) ability to be evaluated and measured (see Appendix I for the Selection Committee Report).

Selection of the topic for ACU's QEP included members of every constituency of the university in the decision. The Selection Committee was charged with facilitating campus-wide discussion on appropriate QEP topics, creating proposals, and narrowing those proposals into three final topics. The Selection Committee consisted of both faculty and staff representing many of the different departments and colleges at ACU, including Bible, Education, Business, Psychology, Communication, English, and Music. The committee conducted face-to-face meetings to generate and evaluate ideas.

In April of 2009, six "Brainstorming Sessions" were hosted by the Adams Center for Teaching and Learning Excellence, with faculty and staff from across the university discussing and providing input on possible QEP topics. Approximately 65 faculty and staff representing diverse academic and student life entities attended these "Brainstorming Sessions." These sessions generated ideas and provided feedback to help guide the Selection Committee. Additionally, one meeting of the College of Arts and Sciences faculty was dedicated to discussion of possible QEP topics.

On May 24, 2009, committee member Jeff Arrington assembled a focus group of students from a cross section of ACU's student body and representing a variety of majors from the College of Arts and Sciences, the College of Biblical Studies, and the College of Business Administration. The Selection Committee also worked with the Associate Vice-President for Alumni Relations to gather input from alumni using a survey requesting feedback on the QEP ideas in development from all ACU alumni.

In May 2009 a *Zoomerang* survey gathered feedback from faculty and staff on the four most-often discussed topics from the face-to-face meetings. 210 faculty and staff representing every college in the university, the Library, the university staff, as well as other units responded. Responses were compiled into an "Ideas Grid" (found in Appendix I).In August 2009, the Board of Trustees provided additional feedback on the four topics through general discussion and written comments.

Using the Ideas Grid formed from the survey responses and the discussion from the variety of face-to-face meetings held in the Adams Center, the committee reconvened Fall 2009 to analyze the information from the survey responses, discussions, and the Ideas Grid and begin development of the three QEP topic proposals. Using the combination of face-to-face meetings, focus groups, surveys, and written feedback, we were able to garner broad-based participation from trustees, students, alumni, faculty, and staff.

Needs Assessment Results

National Study of Student Engagement (NSSE)

Four areas from the **NSSE**, given to first-year students and seniors, were influential in the selection of our QEP topic. Because the QEP must be a response to student learning data collected, we particularly noted areas where our findings did not meet expectations and where academic challenges and enriching educational experiences were not met. Items were analyzed and examined, comparing ACU student scores with that of our peer institutions, other Carnegie Institutions, and NSSE scores overall.

FLAT
INCREASE
DECREASE

NSSE: 2010 2009 2008

110021 2010						2003	2000
Academic and Intellectual Experiences		ACU	Peers	Carnegie	NSSE		
1.d. Worked on a paper or project that	FY	3.02	3.2	3.13	3.11		
required integrating ideas or information	SR	3.3	3.44	3.39	3.35	3.19	3.14
from various sources.							
1.i. Put together ideas or concepts from	FY	2.67	2.74	262	2.65		
different courses when completing	SR	2.91	2.98	2.97	2.96	2.91	2.87
assignments or during class discussions							
1.p. Discussed ideas from your readings or	FY	1.94	2	1.9	1.89		
classes with faculty members outside of class.	SR	2.13	2.21	2.15	2.09	2.11	2.22

Academic and Intellectual Experiences provided mixed information:

 1.d. showed an increase in senior's responses but was well below comparison groups. Three year trends for seniors show an increase in the scores, but also support the need for additional skills in integrating ideas and information from a variety of sources. • 1.i. remained flat and comparable to comparison groups. Students stated decreasing frequency of discussing ideas with faculty members but the ACU score is somewhat equal to other groups.

2. Mental Activities		ACU	Peers	Carnegie	NSSE	2009	2008
2.a. Memorizing	FY	3.06	2.89	2.95	2.95		
	SR	2.02	2.72	2.8	2.8	2.86	2.93
2.b. Analyzing	FY	3.2	3.27	3.13	3.15		
	SR	3.21	3.39	3.2	3.29	3.21	3.13
2.c. Synthesizing	FY	2.89	3.06	2.9	2.94		
	SR	2.99	3.23	3.11	3.1	2.99	2.93
2.d. Making Judgments	FY	3.01	3.04	2.93	2.94		
	SR	2.97	3.15	3.06	3.05	2.93	2.97
2.e. Applying	FY	3.06	3.13	3.07	3.08		
	SR	3.16	3.33	3.27	3.26	3.23	3.13

Mental Activities provided significant information for the direction of the topic.

- 2.a. Memorizing showed a significant decline from 2008. There was a full point difference between first-year students and seniors indicating that first-year students believe there is a higher emphasis on memorizing than do seniors. Seventy-two percent of first-year students in 2010 indicated "quite a bit" and "very much" memorizing.
- 2. **2.b.** Analyzing scores were significantly lower than comparison groups but equal to the 2009 score.
- 3. **2.c.** Synthesizing remained flat for ACU scores but somewhat below comparison scores.
- 4. 2.d. Making judgments is flat with 2008 score but lower in 2009
- 2.e. Applying scores are significantly lower for ACU since 2009 and well below the scores for comparison groups. A QEP of Research Literacy should significantly raise item 2.e on NSSE due to the emphasis on the application of research.

7. Enriching Educational							
Experience *		ACU	Peers	Carnegie	NSSE	2009	2008
7.d. Work on a research project with a							
faculty member	FY	0.04	0.06	0.05	0.05		
outside of course or program							
requirements	SR	0.27	0.24	0.19	0.19	0.25	0.22

^{* 0=}Have not decided, Do not plan to do. 1=Done

Thus the mean is the proportion responding "Done" of all valid respondents.

7.h. Culminating senior experience							
(capstone course)	FY	0.03	0.02	0.02	0.02		
	SR	0.26	0.45	0.33	0.33	0.27	0.2

Enriching Educational Experiences demonstrated the potential success of a Research



Literacy QEP, especially the mentoring aspect in the culminating senior capstone experience.

1. **7.d** work on a research project with a faculty member should show a substantial increase in the number reported for seniors at ACU (0.27). This score will be monitored on each department's annual program

assessment on TaskStream.

2. The culminating senior experience score in 7.h should increase due to all departments developing a capstone experience. Note the large difference between ACU's 0.26 and the Peer Group score of 0.45 and the NSSE score of 0.33. Our QEP topic of Research Literacy culminating in a senior capstone experience should help us on the long journey we have to go to improve results on this one!

11. Educational and Personal							
Growth		ACU	Peers	Carnegie	NSSE	2009	2008
11.e. Thinking critically and							
analytically	FY	3.28	3.32	3.25	3.25		
	SR	3.38	3.47	3.4	3.38	3.31	3.3
11.f. Analyzing quantitative problems	FY	2.9	3.03	2.98	2.99		
	SR	2.88	3.15	3.11	3.11	2.98	2.99
11.g. Using computing and							
information technology	FY	3.14	3.02	3.06	3.05		
	SR	3.07	3.2	3.22	3.22	3.13	3.2

Educational and Personal Growth is directly addressed in student learning outcomes within the new Core Curriculum and QEP topics. The decrease evidenced in **11.g.** will be examined closely as students have opportunities for growth in information literacy skills.

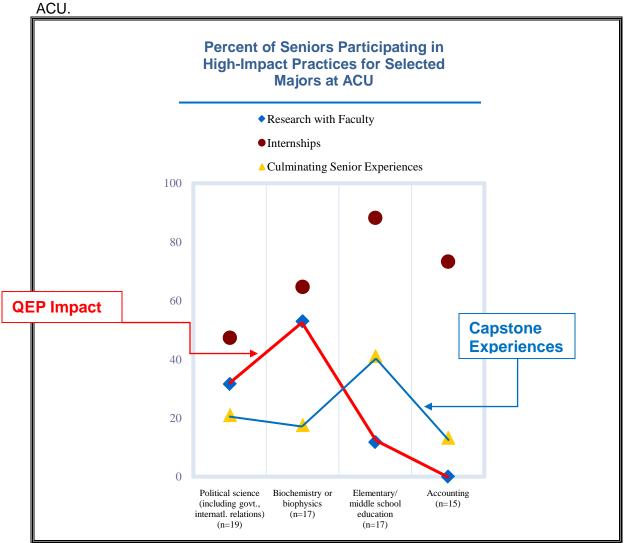
Participation in High-Impact Practices in Selected Fields at ACU

In the Executive Snapshot 2010, NSSE's *Annual Results 2010* calls attention to distinctive patterns of engagement by major field of study. The figure below compares seniors in up to four of our largest academic majors, charting participation in three *highimpact practices*: research with faculty, internships or field experiences, and culminating

senior experiences. High-impact practices are believed to have positive effects on student learning, retention, and engagement.

NSSE data continues to indicate the need for student learning experiences in which students conduct research or make creative projects with faculty mentors. The addition of culminating senior experiences in ACU's Capstone Experience should meet the high expectations students and improve the undergraduate learning experiences of students.

The visual found below depicts the perceptions of seniors in selected majors at



Sources of Inspiration

Culture

ACU is a unique community of learners, dedicated to scholarship and committed to Christ. In every major, students gain a broad perspective on the world through the

liberal arts core curriculum. The university also provides professional and preprofessional studies programs that have produced outstanding graduates in such fields as medicine, law, journalism, ministry, business, physics, nursing, graphic design, psychology and education. One of our university's primary goals is to foster a lifelong love of learning in our graduates.

Abilene Christian University is currently in the midst of unprecedented change and opportunity. With new leadership, new core curriculum, and the drive to enhance student learning, it is easy to see how ACU is poised to make great strides in its development and effectiveness as a university.

The University's administration is prepared to both carry forward recently introduced programs such as general education and mobile learning and to re-evaluate existing programs, updating them to meet the needs of the 21st-century institution. The recent award of a \$1.8 million contribution from AT&T for the Learning Studio provides evidence that technology-enhanced learning at ACU is progressing successfully.

Connection to Mission of ACU

Throughout its history, ACU has been committed to educating students for Christian service and leadership. As part of the creation of the 21st Century Vision, the Board of Trustees reviewed the institution's mission in August 2010 and adopted expanded language as follows:

The mission of Abilene Christian University is to educate students for Christian service and leadership throughout the world. This mission is achieved through:

- exemplary teaching offered by a faculty of Christian scholars, that inspires a commitment to learning;
- significant research grounded in the university's disciplines of study, that informs issues of importance to the academy, church, and society; and
- meaningful service to society, the academic disciplines, the university, and the church, expressed in various ways, by all segments of the Abilene Christian University community.

The goals of the selected topic of Research Literacy significantly connect and address the achievement of the University Mission in the following ways:

• **commitment to learning**: The QEP topic of research literacy, interwoven in the new core curriculum and within majors will enhance student learning in essential areas of learning in today's world: critical thinking, information literacy, and research skills. Students will graduate with

- abilities to pursue diverse directions on their life-journey built upon a commitment to continuous learning.
- significant research: Students will have a fundamental understanding of research and its significance to their lives through their studies, the knowledge they produce, the activities in which they participate, and the opportunities they have to



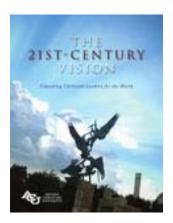
conduct scholarly or creative research. As a consequence of their ACU experiences, they will be prepared for a lifetime of productive citizenship.

Connection to 21st Century Vision

ACU's 21st Century Vision and the QEP are directly related in several important ways. The first tenet of the 21st Century Vision states that ACU will produce leaders who think critically, globally and missionally. Thinking critically is precisely what the QEP will nurture by systematically and recursively enhancing students' information and research

literacy through the QEP Pyramid model (see figure 4.1). A strong liberal arts core curriculum will ensure these future leaders "learn how to learn."

The second tenet of the 21st Century Vision is that ACU will build distinctive and innovative programs that will provide uncharacteristic opportunities for student research and hands-on learning by investment in a fully-developed Honors College and creating highly-attractive academic programs that set the university apart. The QEP is just such a dynamic academic program, and one of its aims is to work closely faculty across the campus in order to cultivate independent, publishable research from ACU's top undergraduate students.



While the third tenet, delivering a unique, Christ-centered experience that draws students into community, may not seem as readily applicable to the QEP, it nevertheless highlights a vital part of the Development Team's plan for this program. Our vision for the QEP is that students and faculty will come together to share ideas and undertake research projects in what will be a university-wide community based on research. The 21st Century Vision states that, for residential students, ACU's culture and physical environment will be shaped to encourage spontaneous, deep discussions with fellow students, faculty and staff about a wide variety of topics, which includes student research as specifically developed through the QEP.

General Education—Liberal Arts Core Curriculum

To understand the vision for the QEP and how exactly it will be realized in the daily life of ACU students, it is instructive to examine ACU's Liberal Arts Core Curriculum adopted by the faculty in 2007. Go to http://blogs.acu.edu/qep/ for a copy of

the Liberal Arts Core Curriculum document. No login or password is needed.

Making the case. In 2002-03, the University General Education Committee (UGEC) formed an ad hoc committee, the General Education Review Steering Committee (GERSC), to conduct a comprehensive review of ACU assessment results, benchmark ACU's curriculum with comparative colleges, and evaluate best practices in general education.

The GERSC reviewed direct and indirect measures of student learning using local and national assessment data including Writing Assessment at ACU, the ACU Faculty Survey on General Education, National Survey of Student Engagement (NSSE), and the Academic Profile. These data suggested students were performing below our expectations on writing, problem solving, critical thinking, and global awareness.

The original findings of the UGEC and GERSC continue to be confirmed by subsequent assessments. NSSE data (2006) demonstrates areas ACU students compare below expectations in level of academic challenge including hours spent preparing for class, number and length of assigned readings, number and length of written reports, and coursework emphasizing critical thinking (analysis, synthesis, making judgments, and application of ideas).

This reinforces the previously identified need to strengthen the critical thinking skills that are necessary for effective research and which are honed through the practice of research and/or creative activity. ACU has been working toward enhancing these skills before the QEP was developed and our QEP topic, *Research Literacy*, is the next step in an ongoing effort to enhance student learning and produce better-equipped students, scholars, and overall community participants.

In addition to assessment data mentioned previously, the GERSC reviewed best practices in liberal arts education by attending conferences sponsored by Association of American Colleges and Universities, a national leader in liberal arts education, visiting and studying colleges known for excellent liberal arts core curriculula, and reading publications such as *Greater Expectations: A New Vision for Learning as a Nation Goes to College* (AAC&U, 2002) and *Making the Case for Liberal Education* (Humphreys, 2006).

Fundamental understandings. In 2004-05, the GERSC proposed a significant transformation in general education at ACU in a preliminary report to the faculty entitled "Flags on the Flagpole." They presented three different curricular plans, all based on six fundamental understandings that underlie the design of the proposal. These fundamental understandings emphasize the value of liberal arts education in providing all majors at ACU with durable and transferable skills to equip them for the demands of the 21st century. Two of the six understandings are directly related to QEP student learning outcomes:

 The learning of our students is enhanced when the structure of the curriculum addresses the nature of students that come to ACU and provides increasingly challenging learning opportunities as they progress through their studies.

The learning of our students is enhanced when we engage them in the key
processes that comprise and enhance critical thinking—reading and writing,
speaking and listening.

Student learning outcomes. With these fundamental understandings as the foundation of the curriculum proposal, the GERSC proposed new student learning outcomes. Students who complete their undergraduate education at ACU should have demonstrated learning in five areas. Three of the five areas relate directly to the QEP:

- Strong analytical, communication, quantitative, and information skills
 - achieved and demonstrated through learning in a range of fields, settings, and media, and through advanced studies in one or more areas of concentration.
- Deep understanding of and handson experience with the inquiry practices of disciplines that explore the natural, socio-cultural, aesthetic, and religious (or theological or spiritual) realms—



- achieved and demonstrated through studies that build conceptual knowledge by engaging learners in concepts and modes of inquiry that are basic to the natural sciences, social sciences, humanities, arts, and Christian faith (or theology).
- Habits of mind that foster integrative thinking and the ability to transfer skills and knowledge from one setting to another—achieved and demonstrated through advanced research and/or creative projects in which students take the primary responsibility for framing questions, carrying out analysis, and producing work of substantial complexity and quality.

Much of ACU's QEP topic evolved from the two Fundamental Understandings and the three Student Learning Outcomes described above. A focus on Research Literacy will be implemented across the University—both in general education and in the disciplines. Research literacy begins with the ability to understand and use scholarly sources, develop strategies to seek answers, and evaluate information in order to critically and effectively implement research informed decisions. Research literacy is then found in the process used to prepare, present, and assess scholarly and creative products. As students understand the process they are better at assimilating their abilities into work with faculty mentors conducting research or making creative products. The culmination of research literacy lies in the public sharing of one's work for a context of critique, extension, and correction.

The crossover between these elements of the Liberal Arts Core Curriculum, whose beginnings goes back to 2002 and whose final draft was created and approved in 2007, exhibits both a real need in the institution for this topic and a commitment on the

part of ACU to the actualization of this plan.

Facts about Incoming Students Fall 2010

32% Qualify for Honors
54% Graduated in the Top Quarter of their Class
37% scored 27 or higher on ACT
27% scored 1220 or higher on SAT
Average High School GPA--3.69

ACT Scores

In Fall 2010 university officials touted the academic credentials of the freshman class. The average ACT score for incoming freshmen was 25.0, up from the previous record of 24.2 set in 2009 year and up more than a full point from two years ago. ACU President Phil Schubert said that benchmark is two years ahead of the university's institutional goal to incrementally heighten academic standards.

Presidential Scholars

A record number of high-achieving, academically advanced high school students visited campus this semester, Spring 2011, to interview for Presidential Scholar awards. There were invited 453 applicants, significantly more than last year's record of 321, 272 in 2009, 244 in 2008 and 158 in 2007. This is a strong indicator that student demand continues to increase among students of high academic ability, especially among those interested in a faith-based institution with demonstrated commitment to academic quality.

To be eligible for Presidential Scholar competition, prospective students must be in the top 10 percent of test-takers nationwide, and have participated in many extracurricular and leadership positions. Fifty-seven percent of the 453 applicants have never previously visited ACU, compared to thirty-three percent in 2010.

Technology and Mobile Learning Demographics



Freshmen entering ACU in the Fall of 2010 made substantial use of university-provided mobile devices during a newstudent orientation week and the majority of them completed a survey at week 3 of the semester. The survey requested information regarding mobile devices and computing resources students brought to campus with them and asked students to

rate their expectations for class-related mobile device usage. A total of 783 freshmen

completed the survey. Tabulation of responses shows that the vast majority of students entering ACU in Fall 2010 already had a cell phone (>97%) and brought a computer with them (>96%). In addition, approximately 85% of that group reported having a text messaging plan prior to coming to ACU, while less than 30% had previously used a data plan ("monthly quota" or "unlimited").

In light of the significant publicity and overall attention given to ACU's Mobile Learning Initiative, it is not surprising that these first-year students report very high expectations for class-related device usage and positive impact on the academic experience at ACU. Specifically, over 90% or respondents indicated that they expected use of their mobile device to increase their class involvement. Similarly high expectations were observed for expected increases in class interest (92%), improvement in academic organization (96%), and improved quality of academic work (83%).

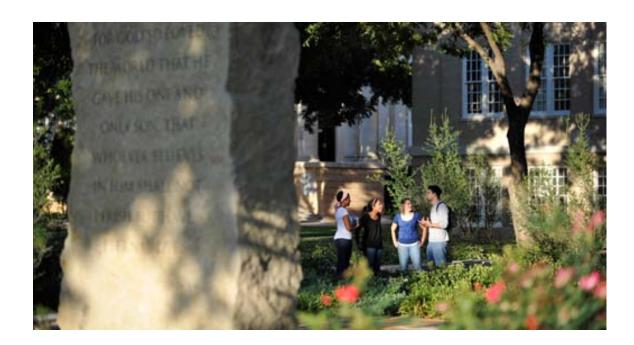
Overall, it is clear that most students arrive on the ACU campus with their own technologies in hand (computers, printers, camera, game devices, etc.) and have significant prior experience with and knowledge of mobile device use. These students appear well-prepared for learning in the exciting and challenging environment created by incorporating mobility throughout the higher education experience, both in and out of the classroom.

Summary

- NSSE data makes a strong case for a Research Literacy initiative, a compelling challenge for the university to become more rigorous academically. Implementation of a Research Literacy Initiative would significantly alter educational expectations and learning experiences of our students
- 2. The **Mission** of the University directly connects to the goals and plans for the Research Literacy Initiative.
- 3. **21**st **Century Vision** addresses the ideas of critical thinking and distinctive innovative programs, encouraging research with a faculty mentor or creation of a performance or art work with faculty mentors.
- 4. The new Core Curriculum provides the foundation for the QEP building strong analytical information literacy skills; developing conceptual knowledge and modes of inquiry in the engagement of learners; and fostering research and/or creative projects with integrative thinking and transference of skills and knowledge to the production of complex and quality work.
- 5. Average **ACT scores** are at an all-time high.
- 6. The substantial increase in the number of **Presidential Scholar applicants** shows that potential entering students are top-notch scholars with a proven record of scholarship and leadership.

7. **Technology and Mobile Learning data** indicate an increased sophistication of our students with tools of technology and calls for a comparable sophistication with ethical and evaluative use of research literacy.

Demographics for the Fall 2011 entering class suggest the University is well-positioned to challenge students to become more research literate. The facts illustrate the sophistication of our current student body brings a new era of high expectations and this is why our QEP of Research Literacy is a good match for the quality of our students body. Research Literacy is the right topic and now is the right time in the history of ACU to implement an innovative, ambitious initiative.



4. Identification of the Topic

After soliciting input from all constituents of the University; analyzing the demographics and needs of the students, the direction of the University through its Mission and 21st Century Vision; and the implementation of the new Core Curriculum, it became obvious that Research Literacy should be the topic of focus. The Topic Selection Committee considered the input, examined the three faculty-researched proposals and made its recommendation to the SACSCOC Leadership Team (see Appendix I for a copy of the Topic Selection Committee Report).

The Compliance Workgroup selected the QEP Development Team composed of 9 faculty and 2 staff, representative of the academic divisions and the disciplines taught at ACU; a student member; a member of the Board of Trustees; and an alumnus and community representative. Because the faculty shoulders responsibility for student learning and the delivery of the curriculum of the University and because the role of the QEP is to enhance the learning of students, the core group of the development team is made up of faculty.

Identifying the Topic

The QEP Development Committee began work in December 2009, initially charged with nine important goals: defining the topic more specifically, defining the student learning outcomes associated with the topic, researching the literature related to the topic and identifying best practices, identifying the plan of action to be implemented to enhance the student learning, establishing a timeline for developing the planned activities, soliciting the broad-based support and input of our constituents, showing evidence of sufficient resources, and writing a comprehensive evaluation plan.

Defining Research Literacy

The Development Team quickly realized that, although information literacy is fairly well-defined and broadly agreed upon, there were few established parameters of what research literacy involved and little agreement among universities involved in this same topic. Several steps were taken to address the issue.

A Defining Subcommittee, made up of Development Team members who would research, explore, and present a definition of research literacy that could guide the Development Team, was appointed in early February, 2010. The subcommittee was chaired by Jeff Arrington and included 5 Development Team members, and was charged to describe "research literacy" in language that includes and honors the full range of "scholarship and/or other creative activities" appropriate to each field of study available to ACU's undergraduate students.

Best Practices Subcommittee

Another subcommittee formed to examine best practices and conduct literature reviews, and began its work in early February 2010. The subcommittee was chaired by Mark McCallon, Associate Director of the Brown Library, and was comprised of 5

Development Team members.

The objective of the QEP Best Practices Subcommittee was to identify exemplary programs at ACU and other institutions that demonstrate research literacy. The subcommittee conducted a review of selected institutions that are members of the Council of Undergraduate Research (CUR) and other peer institutions for programs and activities that might be implemented in the QEP, reviewed existing programs or activities at ACU for potential fit with the QEP, and determined methods of assessment of research literacy that could be used

research literacy that could be use

across the university.

Marketing Subcommittee

The objective for the Marketing Subcommittee was to development and implementation of a plan for marketing the QEP to all constituents. The committee was chaired by Kris Evans, Director of Strategic Marketing. The sample advertisement to the left will be a part of the marketing blitz in the Optimist (student-produced school newspaper). Samples of the marketing plans and other sample advertisements are included in Appendix II.



Ex Officio Members

Four ex officio members serve on the Development Team in consulting positions: A member of the Adams Center Faculty, the Director of Undergraduate Research, the Director of the Research and Sponsored Programs, and the Assistant Provost for General Education.

Development of the Plan

Communication--Input from Constituents

The Development Team collaborated with diverse campus partners, building a comprehensive plan to engage students in the understanding of research, its processes and its value to their ACU education. In an effort to provide an avenue for input and collaboration with constituents, a blog was set up on the ACU server to keep constituents informed and provide a venue for feedback. All faculty, staff, students,

To Logon to QEP:

QEP Blog

(or type in URL:

http://blogs.acu.edu/qep/)

You do not need a login or password for access.

and alumni who have an ACU logon may access the blog to view the progress of the committee, minutes of QEP meetings, informational documents, and comment on committee activities. Reports of the progress of the Development Team were given at most faculty meetings, college meetings, staff senate meetings, and Board of Trustees meetings. The link is QEP Blog (or http://blogs.acu.edu/qep/)

Names of subcommittee members and the subcommittee's objectives are posted to the QEP Blog (or

http://blogs.acu.edu/qep/) in order to provide a forum for input and provide an avenue for questions from both the Development Team and the university's constituents. Meetings of minutes, shared resources, and other informational materials can be found on the blog site. A *Pursuit* website that can



be found as a link off the ACU homepage is currently in development. The *Pursuit* website will showcase exemplary departments, faculty, and students involved in research or creative projects. The website address is: acu.edu/pursuit. This will be the primary location for faculty, staff, and students to really understand the benefits and opportunities that the QEP will bring to them and to ACU.

Student assistance. Students enrolled in an Art and Design Course: *Identity and Brand Design* were given the task of researching our QEP topic of *Research Literacy* and designing a brand/logo for use in marketing the idea to the campus. They presented their designs and explanations for the designs to the Compliance Workgroup as a part of their final exam.

Faculty and staff input. As the QEP Development Team met biweekly and then weekly, team members provided informed feedback to members of their departments and colleges to bring shape and definition to the ideas. Four additional meetings were held in the Adams Center for Teaching and Learning classroom during fall 2010 to solicit additional input and update faculty and staff on the QEP development.

Ongoing evolution of plan. Based on feedback to be received during the onsite SACSCOC visit in April 2011, team members will meet with each department on campus to assure faculty are informed and to find ways the QEP can serve the faculty and students in each department. QEP Development Team members will also conduct student forums during Spring 2011regarding ways the QEP can address research, scholarship, and creative activities' needs of students across campus.

Visualization of Plan—Pyramid

Because the concepts of "Research Literacy" is not *lingua franca* in higher education, the Development Team created a visual model designed to capture key concepts and make them more understandable to diverse constituencies of the University. Built around the concepts of *exploration*, *creation*, and *expression*, the model establishes learning outcomes at progressive levels, demonstrating the progressive nature of the QEP.

It is important to remember, however, that ACU does not intend this to be a linear

progression where students work their way up the levels of the pyramid to a stopping point. Instead, this pyramid is meant to be understood as a recursive process, one where students will continually progress in their research and critical thinking skills. This is of paramount importance since one's learning is never finished, and new media for research and dissemination are constantly being introduced.

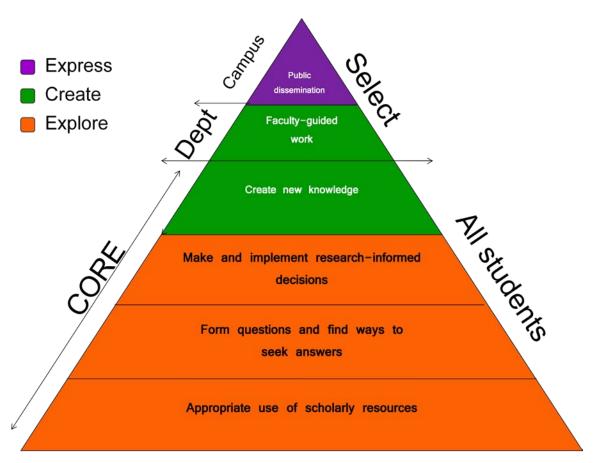


Figure 4.1

5. Desired Student Learning Outcomes

Pursuit, Abilene Christian University's Research Literacy Initiative, is envisioned in terms of three specific, well-defined curricular goals, each clearly articulated student learning outcomes.

5.1. Goal 1 *EXPLORE*—Students will acquire information literacy competencies and skills at both the basic and more advanced research levels through exploration and inquiry.

Student Learning Outcome 1.1: Students will understand and appropriately use scholarly sources. More specifically, students will:

- Determine the nature and extent of the information needed,
- Access needed information effectively and efficiently, and
- Use information ethically and legally.

Measurement: Standardized Assessment of Information Literacy Skills (SAILS) will be given to all students before week three in CORE 110. An evaluative essay meeting specific requirements is required of all students, collected in CORE 110, and assessed using the rubric *Explore 110* (see Appendix III for Sample Rubrics).



Student Learning Outcome 1.2: Students will integrate knowledge to frame researchable questions and to develop strategies to seek answers. More specifically, students will be able to

- Describe major theories in the field relevant to a particular case, problem, or situation, and
- Describe findings and interpretations in the field relevant to a particular case, problem, or situation.

Measurement: A research paper will be collected in CORE 220 and assessed using the rubric *Explore 220* (see Appendix III for Sample Rubrics and <u>QEP Blog</u> or http://blogs.acu.edu/qep/ for copies of all other rubrics).

Student Learning Outcome 1.3: Students will analyze, interpret, and/or evaluate information and make and implement research informed decisions. More specifically, students will

 Evaluate information and its sources critically and incorporate selected information into their knowledge base and value system; and Use multiple sources effectively to accomplish a specific purpose or assignment.

Measurement: A research paper will be collected in CORE 220 and assessed using the rubric Explore 220 (see Appendix III for Sample Rubrics and http://blogs.acu.edu/gep/ [no login or password needed] for copies of all other rubrics).

5.2. Goal 2 CREATE—Students will create and produce new information as they write, present, and perform.

Student Learning Outcome 2.1: Students prepare, present, and assess the effectiveness of scholarly and creative products. More specifically, students will:

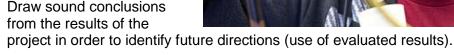
- Demonstrate effective use of information literacy skills through written communication;
- Apply information to the planning and creation of a particular product or performance; and
- Demonstrate critical thinking as they develop, produce, and evaluate a products or performances.

Measurement: A writing assignment from a discipline-specific Capstone Experience will be collected and assessed using the rubric Capstone Rubric (see Appendix III for Sample Rubrics and QEP Blog or http://blogs.acu.edu/gep/ for copies of all other rubrics).

Student Learning Outcome 2.2: Students will conduct faculty-guided original work

relevant to their field of study. More specifically, undergraduates who wish to work on a project with a faculty member will be able to:

- Perform appropriate research steps in the development and creation of discipline-specific projects; and
- Draw sound conclusions from the results of the



Measurement: Students engaged in faculty-guided work will keep a *Research* Activity Journal that is collected and assessed by the faculty mentor and the Assessment of Project Report. The journal and report will be assessed using the CREATE Rubric (see Appendix III for Sample Rubrics and QEP Blog or http://blogs.acu.edu/qep/ for copies of all other rubrics).

5.3. Goal 3 *Express*—Students will express their research through independent scholarly and creative work in a public setting.

Student Learning Outcome 3.1: Students will publicly disseminate independent scholarly and creative work in a public setting.



- Students will produce independent scholarly and/or creative products:
- Students will demonstrate professionalism in the presentation of scholarly and creative products beyond the classroom; and
- Students who present research projects and/or creative projects to audiences external to ACU will demonstrate professionalism in the presentation

of original intellectual or creative contribution to the discipline.

Measurements:

- Students producing scholarly or creative work for the Undergraduate Research
 Festival (URF) must submit abstracts describing the product for admittance to the
 Undergraduate Research Festival. Faculty reviewers assess the abstracts using
 the Review of Submitted Abstracts Rubric (see Appendix III for Sample Rubrics
 and QEP Blog or http://blogs.acu.edu/qep/ for copies of all other rubrics).
- Students accepted to the URF submit papers to be assessed using the Papers/Verbal Presentations Rubric or the Posters/Presentations Rubric. Faculty score the papers/poster products (see Appendix III for Sample Rubrics and QEP Blog or http://blogs.acu.edu/qep/ for copies of all other rubrics).
- Students receiving grants from the Office of Undergraduate Research, Honors College, or *Pursuit* Grants will submit a paper based on their project. Faculty reviewers will assess the work using the *Writing Assessment Rubric*. Students will also submit a *Research Project: Student Self Assessment* (see Appendix III for Sample Rubrics and <u>QEP Blog</u> or http://blogs.acu.edu/qep/ for copies of all other rubrics).
- Students who present research projects and/or creative activities to audiences external to ACU will submit evaluation forms from peer-reviewed conferences.

Summary

Goals from the selection of the topic of Research Literacy provided a beginning for the establishment of specific student learning outcomes. As the literature review and current best practices were carefully vetted and critiqued, outcomes enhancing students' learning gave direction for specific ways to plan for changes in the knowledge, skills and behaviors of students. Specific, focused, and measureable outcomes were developed in an effort to provide clarity and direction for the QEP.

6. Literature Review and Best Practices

In the process of examining the topic selected and student learning outcomes detailed in the previous section, a literature review and review of best practices was begun. From the initial definition we wrote for research literacy that encompassed the six learning outcomes developed, it was decided that as students increase in research literacy, we want them to learn to:

- 1. Understand and appropriately use scholarly resources;
- 2. Integrate knowledge to frame researchable questions and to develop strategies to seek answers;
- 3. Analyze, interpret and/or evaluate information in the field in order to make and implement research-informed decisions:
- 4. Develop strategies to prepare, present and assess effectiveness of scholarly and creative products;
- 5. Conduct faculty-guided original work relevant to the field of study; and
- 6. Publicly disseminate independent scholarly and creative work.

Beginning with assistance from library faculty, a review of the literature was conducted in search of relevant theory and best practices in each of three broad student learning areas or goals for the six specific student learning outcomes found above: *Explore*, encompassing outcomes 1, 2, and 3; *Create*, encompassing outcomes 4 and 5; and *Express*, encompassing outcome 6.

6.1. EXPLORE

The Association of College and Research Libraries (ACRL, 2000) defined information literacy as a collection of abilities requiring college students to "recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information" (ACRL, 2000, p, 2). The Middle States Commission on Higher Education, in the 2003 edition of *Developing Research and Communication Skills: Guidelines for information literacy in the curriculum*, defined information literacy as:

...an intellectual framework for identifying, finding, understanding, evaluating and using information. It includes determining the nature and extent of needed information; accessing information effectively and efficiently; evaluating critically information and its sources; incorporating selected information in the learner's knowledge base and value system; using information effectively to accomplish a specific purpose; understanding the economic, legal and social issues surrounding the use of information and information technology; and observing laws, regulations, and institutional policies related to the access and use of information (p. 32).

Information literacy is one of the key sets of intellectual skills required in an age inundated and dominated by information. A national study conducted by Educational Testing Service (ETS) supported the fact that information literacy is a deficiency among today's student population. In testing the information and communication technology proficiency of 6300 high school seniors and college students, ETS found students in the study earned half of the possible points and few test takers showed evidence of effective information literacy skills, even with exposure to highly sophisticated technology (2006).

It seems that today's undergraduate students are less prepared to do research than previous generations of students, despite the abundance of powerful new tools to enhance gathering of information. (Breivik, 1998)

University faculty members believe that it is important for students to learn to use critical thinking skills to analyze, interpret, and evaluate information (Yuretich, 2004). Bissell and Lemons (2006) proposed that instructors use rubrics designed by each discipline to aid in evaluating students' development of critical thinking skills in the areas of analysis, interpretation, and evaluation. Calkins and Kelley (2007) suggested providing students with specific criteria that address the areas of credibility, accuracy, reasonableness and support. Further, in order for students to internalize these standards for evaluation of information, there should be more than one assignment in one class devoted to this issue. Rather, the criteria should be used throughout the student's university career in ever-increasing complexity. Students are more likely to use quality resources when they understand how to find them and use them easily (Grimes & Boening, 2001). This suggests that teaching how to evaluate resources should include not just the criteria for evaluation, but also instruction in how to find the resources efficiently.

For students to be successful in this information-centric age, the skills associated with information literacy should be implemented throughout the curriculum and strengthened inside and outside of the educational setting: "The key to success in programs of information literacy is that they become institutional initiatives rather than solely library initiatives" (Bennett, 2007, p. 147). Two major models for programs that develop information literacy have evolved over time: the Compartmentalized or Stand-Alone Curriculum Model and the integrated or distributed curriculum model (Middle States Commission on Higher Ed, 2003).

Compartmentalized or stand-alone courses model. Courses in the stand-alone curriculum model generally emphasize lower levels of information literacy, allowing faculty within the disciplines to retain responsibility for evaluating and understanding content use for specific areas. At lower levels, these classes should be smaller and begin within a student's first two years on campus, then reinforced throughout the student's academic career. New Mexico State University (2010) uses lecture, in-class discussion, hands-on activities, and written assignments to provide students with skills to locate and use information sources found both in libraries and on the Internet. Purdue University (2010) introduced the core concepts of information retrieval and essential techniques for finding, synthesizing, evaluating, and sharing information. University of Oregon (2010) designed a curriculum to provide students with concepts and skills to successfully and effectively operate in an information-rich and globally connected society. Research courses offered within the stand-alone course model rarely attracted many students, even when offered for credit.



In lieu of stand-alone courses, some universities use online tutorials to provide self-paced instruction on information literacy skills to a wide range of undergraduate and graduate students. Staff shortages, point-of-need assistance, distance learning, and interactive, technology-based instruction are all reasons that colleges and universities have become more interested in the use of Internet tutorials (Slebodnik & Riehle, 2009). Dalhouise University provides *LibCasts* (2010),

instructional videos covering many different topics related to research and information literacy with quizzes to assess effectiveness of the tutorials. The University of Minnesota offers *Savvy Web Searching* (2008), an online workshop to teach students to locate high-quality information resources and critically assess their purpose, authority, accuracy, timeliness, and coverage. The online workshop incorporates both video and web pages.

Integrated or distributed curriculum model. "Information literacy instruction is a house that needs two foundations" (Ratteray, 2004, p. 135). Faculty look at their own pedagogical strategies to determine how they are successfully training students to be information literate. Collaboration with librarians on a deeper level leads to an integrated or distributed curriculum model with a core set of information literacy skills embedded into a variety of courses. This model places the attainment of skills in the context of a problem or research idea. Some institutions include the teaching of information literacy skills in a lower level English course. Lincoln Memorial University (2009) implemented a tiered information literacy curriculum in first-year and second year English courses. which is followed by information literacy emphasis in writing courses throughout a student's undergraduate career. Librarians are available as information literacy specialists and a peer tutoring program assists with instruction in the courses. Information literacy is embedded at all course levels. University of Houston's Discovery QEP (2008) utilized Problem-Based Instruction to assist students as they addressed complex, real-world situations. In these research-based courses, students learned to "analyze the problem, find appropriate resources and locate needed information, share their findings, and formulate and evaluate possible solutions" (p. 19). University of South Florida's (USF) INSPIRE (2005) used a new general education curriculum to enhance student research. USF found that through involvement in research projects, undergraduate students "gain the skills necessary for exploration, problem solving, and oral and written expression that can serve them well for a lifetime of learning, work and pleasure. When a student engages in a mentored research project, that student learns to frame meaningful questions in a thoughtful manner. This research process can therefore be a model for a lifetime of problem solving. Researchers learn to evaluate material critically rather than to accept it without evidence" (p. 12).

One avenue that university faculty from many disciplines have used is the practice of Problem-Based Learning (PBL). PBL has been used for many years in medicine (Albanese & Mitchell, 1993), physics (Leonard, Gerace, Dufresne & Mestre, 1999), nursing (Jones & Johnston, 2006), psychotherapy (Sunblad, Sigreall, John, & Linkdvist, 2002) business, education, architecture, law, engineering, and social work (Savery & Duffy, 1995) to aid students in integrating the knowledge and skill base they have acquired to solve a problem in a real world application. Schuh and Busey (2001)

concluded that students involved in PBL significantly improved their ability to integrate information in order to deal with problems. The literature in general provides evidence that PBL may be used to strengthen students' integration of theory and practice (Lam, 2004). PBL is a type of active learning that has been shown to aid in the development of critical thinking and problem-solving skills (Silvan, Leung, Woon, & Kember, 2000).

6.2. CREATE

The Center for Authentic Science Practice in Education (CASPiE) used problem-based learning to develop a set of laboratory modules to engage faculty and students in research as part of the curriculum in their mainstream chemistry courses (Weaver et al., 2009). Students carried out laboratory experiments that were a component of a larger research question. The students gained experience with the authentic process of science and the experiments yielded data that faculty members incorporated into publishable studies. Throughout the process, students learned the necessary chemistry and research skills as they are needed in the module; experimental design, evaluation and interpretation of data, poster preparation, ethical conduct in science, writing an abstract, peer review, and writing a scientific paper. This approach utilizes grading rubrics and a Peer-Led Team Learning model. Other universities developed similar programs where groups of students worked with a faculty mentor in parallel research projects (Carson, 2007; Lei & Chuang, 2009). Student outcomes included having students complete real-world research projects and prepare presentations and formal write-ups of the project.

Howard, McMillan and Pollio (2003) discussed the benefits of an evidence-based practice (EBP) paradigm in a Masters of Social Work program. They outlined seven outcomes of an EBP curriculum. EBP outcomes 6 and 7 pertain to Washington University strategies that enabled students to assess the effectiveness of scholarly products. Outcome 6 evaluates the effectiveness of their own practice efforts; and outcome 7 identifies their information needs as they arise in varied practice settings, defines searchable questions with which to query relevant scientific databases, and locates, critically appraises, and applies interventions based on the evidence that is judged valid and pertinent.

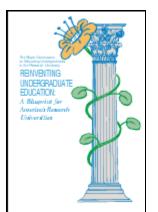
Bernhard, Diaz and Allgood (2005) conducted a survey of students who had completed a master's degree specific to English language learners. This program had a heavy emphasis on scientifically based research and evidence based practice. The students were not only critical consumers of research literature but researchers themselves by conducting action research projects. The survey found the following real-life outcomes for the students: 1) the emphasis on research allowed the graduates to judge the merits of proposed education reforms and to clarify their own pedagogy; 2) the ability to cite research reports enabled graduates to be heard by colleagues and to depoliticize discussions regarding curricular reforms; and 3) in developing their communities of practice, graduates made connections with others who had been trained in the use of scientific research in education.

Common characteristics of faculty-guided research programs. Faculty-guided research programs at a number of universities were reviewed in order to identify best practices which would assist ACU in its development of the QEP. Despite some unique features, all of the programs possess several common characteristics. First, it

seems essential to establish a committee or a department that is responsible for the oversight of research programs. These committees and departments are responsible for recruiting and selecting students (Evanseck, Gawalt, Huisso, Madura, Nunes, Oki, Seybert, & Venkatraman, 2009; Flores, Darnell, & Renner, 2009), conducting regular, longitudinal program evaluation (Flores et al.), organizing research-oriented professional development programs (Flores et al.), tracking students' progress through the program (Flores et al.), providing support for student and faculty participants (Flores et al.), and identifying research internship opportunities for students (Flores et al.).

Another common feature was the establishment of a communal focus on research among students and faculty. Some programs, such as the Research Experiences for Undergraduates Program at Duquesne University (Evanseck et al., 2009), created this community through intentionally-designed social activities that took place at the beginning of the program. Others provided junior and senior peer mentors with the responsibility of meeting with younger students on a regular basis to monitor research progress and offering bimonthly research seminars with the purpose of building a community based on research (Flores et al., 2009). Each program reviewed emphasized the importance of providing financial support to faculty mentors and often to student researchers as well. These funds were provided by community partners and federal and local grants (Coggins, 2009; Evanseck et al.; Flores et al.; Gregerman, 2009). Finally, providing opportunities for dissemination of students' research findings was an important feature, and programs accomplished this through offering research symposiums and providing opportunities for students to coauthor journal articles with faculty mentors.

Evaluating an undergraduate research program. Adhikari and Nolan (2009) are statisticians who looked at how best to evaluate an undergraduate research program. They specifically evaluated a summer research program in mathematics and advised that programs set clear goals so that they will know if they are successful. Programs should do two evaluations, one at the beginning of the program and one at the end. The evaluation at the beginning can serve as a control. Ideally there would be an actual control group, but it is difficult to find a good control group for research students as students who do not do research or are not accepted are not generally comparable to students who are accepted for research, although with an in-house program it is easier to have a baseline group. All participants – faculty, undergraduate, and graduate students – should be surveyed. It is also good to survey faculty that recommended the



students as they offer a good perspective on the change in the students who participated in research. It is also good to do a follow up survey a few years later to see what the students chose to do.

The Commission. In 1995, the Commission on Educating Undergraduate Students at Research Universities convened to study how to improve the quality of undergraduate education in Research I and II universities. While ACU is not classified as a research university, many of the findings about undergraduate education hold true. To quote the report: "The ecology of the university depends on a deep and abiding understanding that inquiry, investigation, and discovery are the heart of the enterprise...Everyone at a university should be a

discoverer, a learner" (Boyer, 1998, p. 9). The Boyer Commission established an Academic Bill of Rights of which numbers one and three can best be fulfilled through an undergraduate research experience: "1. Opportunities to learn through inquiry rather than simple transmission of knowledge . . . 3. Careful and comprehensive preparation for whatever may lie beyond graduation, whether it be graduate school, professional school, or first professional position" (Boyer, 1998, p. 12). Since the Boyer Report, several groups have studied whether the undergraduate research experience did indeed enhance undergraduate education and the effect it had on students' post-baccalaureate goals.

SRI International, Inc. study. The National Science Foundation (NSF) commissioned SRI International, Inc. to study undergraduate research opportunities across the nation in an effort to understand the effect of the research opportunities on students' career and academic paths. This survey looked at students in both the realms of hard science, technology, engineering, and math (STEM) and social, behavioral, and economic sciences (SBES). Generally, for both STEM and SBES students, the survey showed that undergraduate research increased the probability of students pursuing and obtaining a Ph.D. and had a strong effect on the understanding of research processes, confidence in research abilities, and better awareness of career and other opportunities in their chosen field. Anecdotal evidence also showed that undergraduate research helped some students discover that research is NOT what they want to do. The SRI survey indicated that 30% of the students who participated in research for 12 or more months planned to pursue a Ph.D., compared to only 13% of students who spent 1-3 months in research. SRI also found that the majority of students who participate in research, especially STEM students, have been interested in their field ever since they were children (SRI International, 2006).

In a study of summer research students in scientific fields, Lopatto confirmed SRI international's finding. He found that 45% of the students who participated in summer research planed to pursue a Ph.D., 22.3% planned to continue their education in a health profession field, while 10.8% had decided to pursue an M.D. and Ph.D. (Lopatto, 2007). A study of Meyerhoff Scholarship students who did research during the school year at University of Maryland Baltimore County found that among these high-achieving minority students, there was a 12-17% increase in students who went on to pursue a Ph.D. over students who only did summer research programs or no research. Research during the school year was classified as students who had taken one research class and/or had participated in the university research symposium. It was also found that students who did more intense research programs had an even greater increase in attending graduate school (Carter, Mandell, Maton, 2009).

SRI also showed that being a part of a culture of research had a great effect on the positive outcomes. Being part of a research group, having fun, feeling more independent, attending conferences, etc., was more important to a future in research than having completed proposals, poster presentations, or reports (SRI International, 2006).

The NSF itself sponsors undergraduate research with an emphasis on 8-10 week summer programs. Most students who participated in the summer programs were juniors and seniors with above-average GPAs. Like many other studies, it was shown that students who participated in these programs were more likely to go on to complete a

Ph.D. Participating in research also gave the students a broader view of academic and career opportunities. Students who became more engaged in the culture of research,

such as attending conferences, saw even more benefits. Faculty were driven to participate in these programs because of the personal satisfaction of working with students. Recommendations from studying the NSF programs included involving students earlier in their academic career, especially first-year students and sophomores but even as early as K-12 and focusing more on creating a culture of research. Another key recommendation is that faculty are trained and encouraged in mentoring through workshops and factoring mentoring in the tenure and promotion process (Russell, 2006).

Surveys of former students. Bauer and Bennett (2002) surveyed alumni of the University of Delaware, some of whom had participated in a formal undergraduate research program (URP), others who self-reported participating in other research, and the last group, who had not participated in research. The University of Delaware study showed that students that participated in URP were more likely to be involved in as student government and were just involved in other activities such as intercollegiate and intramural sports, clubs, performing arts, etc. Students

. .students who had participated in research, showed a great increase. . [including] intellectual curiosity and the abilities to acquire information independently, analyze literature critically, speak effectively, develop good leadership skills, and have clear career goals.

Bauer and Bennett, 2002

who participated in URP also reported more benefits from honors classes and were more likely to have completed senior thesis projects.

When asked about how their baccalaureate studies enhanced their skills and abilities, students who had participated in research, especially in the formal URP, showed a great increase in several areas over those who had no research experience. These include intellectual curiosity and the abilities to acquire information independently, analyze literature critically, speak effectively, develop good leadership skills, and have clear career goals (Bauer & Bennett, 2002).

STEM areas. Most research on the benefits of undergraduate research seems to focus on STEM. This might be because some feel that scholarship in the STEM areas may fit more naturally into the curriculum. In "The Two Cultures of Academic Engagement," Brint, Cantwell, and Hanneman (2008) compared what they considered the two different sides of the academy, the natural sciences and engineering versus the arts, humanities and social sciences. They found that traditional undergraduate research experiences were more common and necessary for students who are planning on going into medicine and doctorates, whereas experiences such as study abroad, honors programs, and internships are more important for those in business, law and academe. However, some programs have successfully incorporated research into the humanities and arts. For example, in an Honors apparel program at Florida State University, the students are required to a capstone project, which can be literary research, creative, or both. In two case studies the students did research into the background of the traditional styles, functionality, and use of garments, interviews with clients who would be using the

garments, and then formed a new piece or pieces based on their research. The faculty gains through this process because they can be stimulated from the fresh ideas of their students and can use these projects to stimulate their own projects. Students learn critical thinking and analytical skills that students will need when they go on to graduate school and careers in design (Black, Grise, Barker, Thomas, & Bollinger, 2008).

Dolan and Johnson (2009) looked at not only the benefit to undergraduates, but to their graduate and post-doctoral student mentors. Advanced students who mentor students new to research show many gains that are seen when individuals first start in research, including a better understanding of the field, career goal definition, and cognitive gains. The graduate/postdoctoral students who mentored undergraduates saw a large gain in their teaching and communication abilities; however, there were challenges seen when there was a mismatch in mentor/mentee personality and when the role of the graduate/ post-doctoral student was ambiguous.

Costs and benefits for students and faculty. Lei and Chang (2009) analyzed the costs and benefits for students and faculty to participate in many fields, not just the sciences. They found that both faculty and students saw many of the benefits of



students participating in research as the same. These included an increase in critical thinking skills, more students going to graduate school and into research fields, more excitement for research, and more publication and presentations. Faculty benefits included enhanced teaching skills, the chance to learn and use a variety of research techniques, the joy of mentoring students, and the opportunity to influence student graduate school and career paths. Additional student benefits were the gain of new interpersonal and technical skills. Faculty and

students also identified many of the same costs to students participating in research such as students having little interest, few skills, and a small amount of available time. These were particularly an issue when all students were required to participate in out-of-class research. Other costs identified by faculty included the time-intensive nature of mentoring students, the reliability of students, the lack of financial support for undergraduate research, and the difficulty in undergraduates producing publishable research. Students also identified low or no pay, long hours, and in some instances having to pay for class credit to do research as costs. To somewhat alleviate these costs, Lei and Chang suggest that universities and administrators need to set up funding to support this time intensive task.

The benefit to the students of ACU is the most compelling reason the University should give greater support to undergraduate research. Students who participate in research have a better understanding of research processes, more confidence in research abilities, and better awareness of career and other opportunities in their chosen field (SRI Int'I, 2006). But in addition to the expected improvements directly related to research, undergraduate researchers find that they are more intrinsically motivated (Lopatto, 2007), gain more from their classes, feel they are better speakers, and better learners (Bauer & Bennett, 2002).

National Science Foundation findings. In an evaluation of National Science

Foundation support for undergraduate research opportunities, the following relevant findings were discovered (Russell, 2006):

- Undergraduate researchers were disproportionately juniors and seniors and tended to be high achievers with high GPAs and early expectations to obtain an advanced degree.
- Emphasis was on summer research programs with groups of undergraduates participating in 8-10 week summer programs usually at schools other than their own.
- As compared to student researchers who are not financially sponsored,

sponsored researchers tend to spend more time engaged in undergraduate research and to participate in a greater variety of research-related activities.

 Common research-related activities included collecting/analyzing data, having input to research decisions, having a choice of projects, and completing one's

own project.

 Participation in undergraduate research projects increased the likelihood of obtaining a Ph.D. and had positive effects on understanding of the research process, confidence in research-related abilities, awareness of academic and career options, and changes in career interests. The most common student suggestion was to increase the quantity and quality of faculty quidance.

Faculty indicated the greatest barrier to participation was lack of adequate financial support.

Russell, 2006

- Student researchers reported that they were not well-informed about research opportunities.
- Students who participate in research because they are truly interested and who become involved in the culture of research (attending conferences, mentoring others, authoring papers) were the most likely to experience positive outcomes.
- The most common student suggestion was to increase the quantity and quality of faculty guidance.
- Among faculty, personal satisfaction was the driving force behind participation in undergraduate research. The greatest barrier to participation was lack of adequate financial support.
- Final recommendations based on the findings:
 - Begin attracting students to undergraduate research early, even in K-12 programs, and include college first-years and sophomores.
 - Focus on creating a culture of research.

 Increase effective mentoring by encouraging and funding mentor workshops and recognizing mentoring as a factor in tenure and promotion decisions.

6.3. Express

The Boyer Commission (1998) addressing the need for publication of research, argued that the process of research is a public one in which results must be offered for critique, extension, and correction; therefore, students must learn to express their results in both written and oral communications. This should start as early as their first year. Boyer (1998) also stated, "Dissemination of results is an essential and integral part of the research process, which means that training in research cannot be considered complete without training in effective communication. Skills of analysis, clear explanation of complicated materials, brevity, and lucidity should be the hallmarks of communication in every course" (p. 24).

Pi Sigma Alpha, a political science honor society, sponsors undergraduate research journals. *The Pi Sigma Alpha Undergraduate Journal of Politics* was started at Purdue University and later taken over by Pi Sigma Alpha. The journal is run by a student editorial board with faculty advisers. The editorial board rotates universities every 3 years based on a competitive process. After its start at Purdue University, the journal moved to Union College. The student editorial board consists of approximately 10 students, about half of whom read each submitted article. Students then discuss the articles deciding which is to be included in the journal. Articles accepted by the student editorial board are then passed on the faculty advisory board who aid in the final selection of articles. Articles are assessed by: 1) contribution to the field of political

science, 2) support for conclusions, 3) writing, and 4) methodology (Bauer, Ogas, Shakir, Oxley, & Clawson, 2009).

Public dissemination of work both in written and oral forms aids students in their critical thinking skills as they learn to express what they have learned. (Lei & Chuang, 2009; Bauer & Bennett, 2002). In addition, taking students to meetings, especially professional meetings helped students feel as though they were a real part of the profession (Hunter, Laursen, & Seymour, 2007).



Students who participated on the editorial board of *The Pi Sigma Alpha Undergraduate Journal of Politics* saw improvement in at least four ways. First, the students acquired a deeper learning and understanding of various fields of political science. They began to view political science as a whole field, rather than a string of disconnected classes. Second, there was greater development of academic skills gained through the editing and selection of papers which deepened students' analytical and critical thinking skills. Third, they learned to view their own research in the context of existing literature. The students were exposed to a variety of methodologies, techniques,

statistical analyses, theories, and how research is best performed and expressed. Because they read so many other papers, students also saw in an improvement in their own writing skills. The fourth and final area in which there were student gains was in interpersonal skills, which was fostered as students debated on the merits of various papers. The students learned to focus this debate on collaborative evaluation rather than hostile arguments (Bauer et al., 2009).

In summary the Boyer Commission (1998) provided three characteristics of successful research programs that inform our plan for the QEP topic of Research Literacy.

- The process of discovery is a public one with results being offered for public critique, correction, and extension. Given this, students must learn to convey the results of their work using effective written and oral communication. This must begin in the first year.
- "Dissemination of results is an essential and integral part of the research process, which means that training in research cannot be considered complete



without training in effective communication. Skills of analysis, clear explanation of complicated materials, brevity, and lucidity should be the hallmarks of communication in every course" (p. 24).

• The research skills that begin to be developed in the first year should culminate in a capstone experience in which students participate in a project that requires asking a significant set of questions, the research or creative exploration to find answers, and the communication skills to convey their results. The capstone experience should be conducted under the mentorship of an experienced faculty.

Summary

As the Development Team researched and analyzed the topic of Research Literacy and reviewed the literature and best practices relating to the topic, a list of important components of our plan emerged. It was from this list that a plan of action emerged. A description of the plan for implementation is found in the next section of this document: Section 7. Identification of Actions to be Implemented.

Resources are available at the end of this document.

Note: a summary of information regarding additional best practices is found below.

Summary of Additional Best Practices Information

Research Experiences for Undergraduates (REU) Program, Duquesne University (Evanseck et al., 2009)

- Partnerships with other universities including Florida Memorial University, Prairie View A&M University, Jackson State University, and the State University of New York at New Paltz.
- Summer research experiences for students and visiting faculty members from partner universities and other primarily undergraduate regional institutions. The focus is on students from institutions with limited resources and students from underrepresented minority populations.
- Student engagement in social activities that allow them to bond with one another and establish strong working relationships with their faculty mentors. These activities begin very early in the program.
- 10 weeks long program consisting of students learning a new project, designing and investigating an original hypothesis, and presenting their work.
- Advisory committee oversight of the operation of the REU site as well as recruiting and selection of student participants. The committee also promotes the REU program, deciding on the content of the material to be distributed for student recruitment and maintaining a list of faculty contacts.
- Student applications that include a cover page with contact information, a statement of goals indicating the type of research desired, the faculty member(s) the student wishes to work with, two letters of recommendation and an official transcript.
- Recommendations/observations for other universities include the following:
 - Recruitment must be targeted as there is intense competition for these students.
 - Faculty members must be supported because of their integral contributions to the undergraduate research experience.
 - Students involved in undergraduate research programs must receive highquality mentorship throughout the entire process.

Redlands Community College (Coggins, 2009)

- With no state funding and a student body that comes from small, rural, underfunded high schools, RCC wished to incorporate applied research into its teaching mission. RCC adopted the mantra that "Research is Teaching."
- Student research projects are incorporated into the curriculum, opening doors for more in-depth projects. Each project must have specific learning outcomes since "teaching is the goal and discovery is what we are teaching" (p. 103).
- The basics of observation, data collection, analysis, and reporting are taught within classroom projects..
- Support for research projects is provided through community partners who
 provide supplies for the project, equipment, or funds to support student interns. It
 is essential to recognize partners frequently and to ensure that they meet the
 students who are working on their projects.

<u>Undergraduate Research Opportunity Program (UROP), University of Michigan</u> (Gregerman, 2009)

 The goal of the program was to increase engagement of diverse first- and second-year students in research with faculty.

- Factors that have contributed to the success of the program include:
 - having a very specific goal,
 - the alignment of the program with research, one of the key missions of the university,
 - drawing upon several campus partners and articulating the benefits of participation,
 - developing carefully designed program components,
 - using work-study funding,
 - careful adapting to serve minority and majority students, and
 - implementing rigorous and carefully designed longitudinal assessment of program's impact.
- Program components include:
 - 6-15 hours per week engaging in research activities such as developing research protocols and surveys, conducting experiments and simulations, making field observations, and collecting and analyzing data.
 - All students in the program are assigned to a peer advisor who is a junior or senior and an alumnus of the program with a common disciplinary interest.
 Peer advisors work 10 hours per week and receive hourly wage.
 Responsibilities include meeting monthly with students to monitor research partnerships, working with them on time management and other transitions, and facilitating bi-monthly research seminars.
 - Bimonthly research seminars designed to create a community of young researchers, teach research concepts, skills, and related issues, and help students develop professional relationships and friendships in their field.
 - Skill-building workshops focus on library and Web research workshops, workshops on using software, and workshops on scientific writing and poster production.
 - Annual research symposium.
 - Students involved in the program receive either academic credit or work study funding.

Model Institutions for Excellence (MIE) Initiative, University of Texas El Paso (Flores, Darnell, & Renner, 2009)

- The purpose of the MIE program is to promote faculty-student interactions and academic integration through laboratory and field research.
- A key to the success of the MIE program at UTEP was the appointment of a fulltime coordinator who fulfilled the following responsibilities:
 - coordinating application and selection process of students,
 - organizing professional-development activities,
 - tracking students' progress through monthly reports,
 - providing personal attention to student and faculty participants,
 - seeking out summer research opportunities and internships for students, and
 - providing support for students interested in attending graduate school.
- Bi-monthly meetings and workshops focus on the following topics:
 - applying to graduate school,
 - surviving graduate school,
 - developing resumes,
 - finding summer research and internship opportunities, and
 - honing presentation skills.
- Student participants identified the following aspects of the program as most

helpful:

- knowledge received about the research environment,
- a chance to learn more about field of interest,
- ability to work on campus in field of interest with a flexible schedule rather than getting off-campus employment,
- report writing,
- development of presentation skills,
- confirmation regarding career direction,
- self-confidence.
- experience, and
- increased chances of acceptance into graduate school.

DISCOVER Program, Marymount University

- DISCOVER office headed by a Director of Student Research,
- development of first-year and transfer student experiences,
- curriculum revision in majors to place emphasis on scholarly inquiry,
- expansion of research opportunities and development of a summer research program, and
- Annual Student Research Day.

UCARE Program, University of Nebraska-Lincoln

- Funding provided by the Pepsi Company and supports 400 students participating in the program annually
- Two year program:
 - Year 1 The student works as a research assistant for a faculty sponsor, performing activities such as compiling literature, coding and retrieving data, working in a laboratory, learning specific research techniques, assisting with experiments, working in a studio, etc. Maximum reward is \$2000.
 - Year 2 Independent project proposed by the student and sponsored by a faculty member--may be an extension of work performed in Year 1 or may build upon skills gained in Year 1. Maximum reward is \$2400.

7. Actions to be Implemented

After examining the literature and the best practices for our topic of research literacy, the QEP Development Team began to collaborate and brainstorm to identify the actions needed to implement the vision of the University's Quality Enhancement Plan. Actions to be implemented are described in the sections below:

- 7.1, 7.2, 7.3 and 7.4--Desired student learning outcomes,
- 7.5--Plan of professional development for faculty,
- **7.6--**Support services for faculty,
- 7.7—Grant support services for students and faculty, and
- **7.8**—Travel support services for students and faculty

7.1. Student Learning Outcomes—*EXPLORE* Information Literacy

In fall 2010, ACU began a new core curriculum for entering first-year students. In response to the new beginnings encountered by the students and the vision of the concepts of the QEP, a plan for implementing the QEP student learning outcomes along with the new curriculum is prescribed. Faculty will weave the information literacy student learning outcomes from *EXPLORE* into CORE 110: The Question of Truth; CORE 120: Human Person and Identity; CORE 220: The Question of Community; and CORE 320: The Question of Transcendence.

Student Learning Outcome 1.1 Students will understand and appropriately use scholarly sources. More specifically, students will:

- Determine the nature and extent of the information needed,
- Access needed information effectively and efficiently, and
- Use information ethically and legally.

Student Learning Outcomes	Yr 1 (FY 12) AY 11-12	Yr 2 (FY 13) AY 12-13	Yr 3 (FY 14) AY 13-14	Yr 4 (FY 15) AY 14-15	Yr 5 (FY 16) AY 15-16
EXPLORE					
	CORE 110 CORE 120				
1.1 Students will understand and appropriately use scholarly sources.		CORE 220			
		•	CORE 320		

The broad scope of the concept of information literacy provides for a structured and iterative understanding of the skills and concepts of information literacy. As students work to increase their knowledge, skills, and behaviors of information literacy, they will continue to learn and enhance the knowledge and skills in deeper ways.

Student Learning Outcome 1.2 Students will integrate knowledge to frame researchable questions and to develop strategies to seek answers. More specifically, students will be able to

- Describe major theories in the field relevant to a particular case, problem, or situation, and
- Describe findings and interpretations in the field relevant to a particular case, problem, or situation.

Student Learning Outcome 1.3 Students will analyze, interpret, and/or evaluate information and make and implement research informed decisions. More specifically, students will

- Evaluate information and its sources critically and incorporate selected information into his or her knowledge base and value system; and
- Use multiple sources effectively to accomplish a specific purpose or assignment.

Assessment of EXPLORE student learning outcomes. While these skills are introduced in CORE 110, practiced in CORE 120 and 220, and reinforced in CORE 320,

Yr 1 (FY 12) AY 11-12	Yr 2 (FY 13) AY 12-13	Yr 3 (FY 14) AY 13-14	Yr 4 (FY 15) AY 14-15	Yr 5 (FY 16) AY 15-16
CORE 120				
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	CORE 220			
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CORE 120				
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	(FY 12) AY 11-12	(FY 12) (FY 13) AY 12-13 CORE 120 CORE 220 CORE 120	(FY 12) (FY 13) (FY 14) AY 11-12 AY 12-13 AY 13-14 CORE 120 CORE 220 CORE 320	(FY 12)

students practice these skills throughout their program of study. Because most students take these courses, a consistent assessment of the QEP student learning outcomes will be possible through assessments in CORE 110 and CORE 220. This will be accomplished through two means:

- Standardized Assessment of Information Literacy Skills (SAILS) is given as a pre-test to all entering first-year students. [The post-test will be administered during CORE 320.]
- An evaluative essay paper is collected and assessed from a cohort group of students in CORE 110 and CORE 220. These artifacts are assessed using the EXPLORE 110 Rubric and the EXPLORE 220 Rubric (see Appendix III for Sample Rubrics and QEP Blog or http://blogs.acu.edu/qep/ for copies of all other rubrics).

7.2. Student Learning Outcomes—*CREATE* new information

After students complete their introduction to and practice of information literacy concepts in CORE 110 and CORE 120, they move into a level of learning where they create

and produce new information as they write, present, and perform.

Student Learning Outcome 2.1

Students prepare, present and assess the effectiveness of scholarly and creative products. More specifically, students will:

- Demonstrate
 effective use of
 information literacy
 skills through
 written
 communication;
- Apply information to the planning and creation of a particular product or performance; and
- Demonstrate critical thinking as they develop, produce, and evaluate a product or performance.

COMS 211. A new course in the core curriculum, COMS 211: Foundations of Speech and Rhetoric introduces students to the development of public speaking knowledge, skills and attitudes through the integration of rhetorical theory, practice and analysis. The COMS 211 student learning outcome states that all students will effectively conduct scholarly research for the rhetorical situation. This is the last course specified in the beginning core curriculum to lay the foundation for student research, scholarship, and creative work.

Keystone Courses. After COMS 211, concepts are introduced, practiced, and reinforced within a student's major discipline. These are courses or experiences in which the student works with a mentor. Faculty and departments are encouraged to revise existing courses or to design new courses that include research, scholarship, or creative work as a

major emphasis. These courses are designated as **keystone courses** in an effort to facilitate support and encouragement for faculty and students to become a part of the community of research. Keystone courses provide the central support for keeping QEP learning outcomes in place, from the cornerstone course in the student's first year leading to the capstone experience in the final year. (See more detail in Section 7.5 Professional Development for Faculty.)

Capstone Experiences. ACU has a long history of Writing Across the Curriculum (WAC). All graduates of ACU successfully complete a course designated as a writing intensive course within their major. Following along the same tradition as WAC, the new general education curriculum and the QEP seek to develop capstone experiences in all majors. Many majors have a capstone course or experience as a part of graduation requirements already.

By the conclusion of the spring semester of 2012, all departments will have developed and submitted a capstone course or experience to the appropriate academic councils for approval. A student's capstone experience provides the final culminating experience for research literacy (see Appendix VII Core Curriculum Capstone Experience Guidelines).

Student Learning Outcomes	Yr 1 (FY 12) AY 11-12	Yr 2 (FY 13) AY 12-13	Yr 3 (FY 14) AY 13-14	Yr 4 (FY 15) AY 14-15	Yr 5 (FY 16) AY 15-16
CREATE					
2.1 Students prepare, present, and assess		COMS 211			
effectiveness of scholarly and creative products.			Keystone course Scholars Program	es, Capstone Exper m	iences, McNair

Assessment of *CREATE* Student Learning Outcome 2.1. All capstone experiences submit artifacts for assessment to a Capstone Assessment Team. The Assessment Team works collaboratively to score all capstone artifacts by the *CREATE Rubric* (see Appendix III for Sample Rubrics and <u>QEP Blog</u> or http://blogs.acu.edu/qep/ for copies of all other rubrics).

7.3. Student Learning Outcomes—*CREATE* with faculty

Student learning outcomes spread throughout the core curriculum and into disciplinespecific courses allow students to progress in their understanding of the importance of research, scholarship, and creative work within their chosen fields. Student Learning Outcome 2.2 Students will conduct faculty-guided original work relevant to their field of study. This outcome stresses the importance for students to partner with faculty to CREATE scholarly and creative products through faculty-guided projects. Not all students will have the interest or the time to work with a faculty member outside of the classroom to create or conduct original work, so in order to assist students in this time commitment, stipends and equipment and material funds are allocated through the Pursuit Grant. [More information about this grant is provided in Section 7.5 Faculty Incentives.] Grants from other areas of the campus are publicized on the Pursuit website and efforts are made to link all students who wish to conduct faculty mentored research, scholarship, or creative endeavor with a faculty member. More specifically, undergraduates who wish to work on a project with a faculty member will:



- Perform appropriate research steps in the development and creation of discipline specific projects; and
- Draw sound conclusions from the results of the project in order to identify future directions.

Student Learning Outcomes	Yr 1 (FY 12) AY 11-12	Yr 2 (FY 13) AY 12-13	Yr 3 (FY 14) AY 13-14	Yr 4 (FY 15) AY 14-15	Yr 5 (FY 16) AY 15-16
CREATE					
2.2 Students will conduct faculty-guided original work relevant to their field of study.				esearch, <i>Pursuit</i> G Frant, McNair Scho	

Assessment of *CREATE* Student Learning Outcome 2.2. All academic departments report the number and type of faculty-guided research and creative activity projects conducted on an annual basis. These data are reported in the Annual Assessment Cycle. The Office of Institutional Effectiveness will harvest the data from departmental annual assessments on the TaskStream website. More information regarding the assessment can be found in Section 11 of this document.

7.4. Student Learning Outcomes—*EXPRESS* research, scholarship, or creative work in a public setting



Student Learning Outcome 3.1, Students will publicly disseminate independent scholarly and creative work in a public setting. The primary goal of research is to add to the body of knowledge in a discipline. The apex of our student learning outcomes pyramid, provides for the peer-reviewed, public dissemination of a student research, scholarship, or creative work. [The pyramid can be found in Section 4-figure 4.1.] This can be accomplished on three levels:

within the classroom, across the ACU campus, and external to ACU.

- Students will produce an independent scholarly and/or creative products;
- Students will demonstrate professionalism in the presentation of scholarly and creative products beyond the classroom; and
- Students who present research projects and/or creative projects to audiences
 external to ACU will demonstrate professionalism in the presentation of original
 intellectual or creative contribution to the discipline.

Student Learning Outcomes	Yr 1 (FY 12) AY 11-12	Yr 2 (FY 13) AY 12-13	Yr 3 (FY 14) AY 13-14	Yr 4 (FY 15) AY 14-15	Yr 5 (FY 16) AY 15-16
EXPRESS					
3.1 Students publicly disseminate independent scholarly and creative work in a public setting.			Undergraduate R Alpha Chi, McNai	esearch Festival, H r Scholars, et al.	onors College,

Assessment of EXPRESS Student Learning Outcome 3.1. The same assessment will be used for Student Learning Outcome 2.2 and Student Learning Outcome 3.1. All academic departments report the number and type of faculty-guided research and creative activity projects conducted on an annual basis. These data are reported in the Annual Assessment Cycle. More information regarding the assessment can be found in Chapter 10 of this document.



7.5. Professional Development for Faculty—QEP Pursuit Institute

Each May, after the spring semester has concluded, a *Pursuit Institute* will be conducted on campus in the Adams Center for Teaching and Learning. The Institute will

consist of ten faculty members selected through a competitive application process and designated as *Pursuit* Fellows. Fellows will actively engage in a 3-week, 10-day institute led by an external facilitator with expertise in active learning and undergraduate research. During the institute, fellows will revise existing courses or design new courses. These courses will be designated as **keystone courses** in an effort to provide



support and encouragement for faculty and students in fulfilling the QEP outcomes. Keystone courses will add an additional information link between QEP learning outcomes in CORE 110 to the capstone experience in the junior or senior year.

Pursuit Fellows will teach the new or redesigned course as a special topics class. Faculty in the Institute will work to include activities that develop QEP student learning outcomes and assessments of those outcomes in a course. At the end of the academic year in which the new courses or redesigned courses are initially taught, fellows use results from course assessments to make adaptations to the course. Adams Center faculty development staff work with fellows to complete course application forms to send through the appropriate academic councils when the course is ready.

7.6. Support Services for Faculty—Reassigned Time or New faculty

Working with students and mentoring their research, scholarship, and creative work requires redistribution of a faculty member's teaching load. The QEP budget plan includes money for funding adjunct pay for faculty members or the addition of a new faculty member each year, beginning in year 3 of the QEP. In December of each year, academic units may submit requests to the *Pursuit* Team with justifications for redistribution of load for faculty or the addition of an additional faculty member for the department. The *Pursuit* Team considers all requests submitted and makes recommendations to the Provost for redistribution of load or for acquisition of a new hire.

7.7. Support Services for Students and Faculty—QEP *Pursuit* Grants

QEP *Pursuit Grants* provide incentives and funding for students and faculty to work together on research projects. Pending approval from SACSCOC for ACU's QEP, faculty may submit applications in January for *Pursuit Grants*. Grant funding requires the projects to include students and faculty working together on research, scholarship, or creative projects. Information for the grants and applications will be found on the QEP

Blog and on the ACU webpage under the Research tab.

Students. During the academic year, students may earn \$1,000/semester for research or creative work with a faculty mentor. This funding is in addition to the faculty funding described below. Faculty members may apply to receive funding for student researchers up to \$2,000 for one academic year (\$1,000/semester). A maximum of four



student researchers will receive funding from any one department. Final award payments to students are made when Research Activity Journals, Research Project: Student Self-Assessment Reports, and Assessment of Project Reports are submitted.

Faculty. The competitive application process provides up to \$5,000 funding for each faculty member. Funding may be used for reassigned time or for expenses related

to research or creative activities with students. Funding for reassigned time will be transferred directly to the department/college to hire relief instructors as needed. Funding for expenses will be awarded through a restricted fund with receipts required to document expenditures. These grants are awarded on a competitive application basis, much like the Cullen and Math/Science Grants, beginning in Year 1. Final award payments to faculty are made when Research Activity Journals, Research Project: Student Self-Assessment Reports, and Assessment of Project Reports are submitted. An equipment budget is included in the grant.

(See Section 10.4. Detailed Multi-Year Budget Narrative or Appendix IV for the Detailed Budget for further description. Appendix V contains a copy of the QEP *Pursuit Grant* Application.)

7.8. Support Services for Students and Faculty—Travel

Beginning in Year 2, faculty and students traveling to conferences to make presentations regarding scholarly or creative products may apply for funding to offset travel expenses. A total of \$10,000 for faculty members and a total of \$10,000 for students is allocated in the budget. The *Pursuit* Team will consider funding proportional to costs of travel and make recommendations to the Provost for final approval.

Summary

Actions for implementation of the selected learning outcomes have been carefully considered and analyzed in context of the mission and the strategic plan of the University. Each of the actions has been examined from multiple perspectives to insure the impact of the QEP on students, faculty and staff is realistic and yet manageable and sustainable. In consideration of these goals and plans, a logical timeline is described in Section 8. Timeline for Implementation.

8. Timeline for Implementation

	Pilot Year 1			١	ear 2	2	١	ear 3	3	`	∕ear ₄	4	Yea	ar 5		
Task	Pilot Year	Sum 2011	Fall 2011	Spring 2012	Sum 2012	Fall 2012	Spring 2013	Sum 2013	Fall 2013	Spring 2014	Sum 2014	Fall 2014	Spring 2015	Sum 2015	Fall 2015	Spring/Sum 2016
Hire Dir of QEP and Staff, set up <i>Pursuit</i> office	X															
Marketing	Χ		Χ	Χ		Χ	Χ		Χ	Χ		Χ	Χ		Χ	Х
Complete assessment strategies	X	Х														
Info gathering— departments	X															
Info gathering - -student groups	X															
				Cur	ricul:	ar Im	nlan	nent	ation	•						
CORE 110				Curi	icui	<u> </u>	ipicii	IICIIL	atioi	<u> </u>						
SAILS taken, artifact assigned and collected	X		Х			X			X			Х			X	
Formation and training of Assess Team I		Х			Х			X			Х			X		Х
Artifacts are		Х			Х			X			Х			Χ		Х
assessed CORE 220		^_			^			^			^			^		
Artifact																
assigned and collected						Χ	Х		Χ	Χ		Х	Х		Χ	Х
Formation, training of Assess Team II								X			X			X		X
Artifacts assessed								X			X			X		X

	Pi	lot	Y	ear ′	1	Υ	ear 2	2	Y	ear 3		١	ear 4	ļ	Yea	ar 5
Task	Pilot Year	Summer 2011	Fall 2011	Spring 2012	Summer 2012	Fall 2012	Spring 2013	Summer 2013	Fall 2013	Spring 2014	Summer 2014	Fall 2014	Spring 2015	Summer 2015	Fall 2015	Spring/Sum 2016
Capstone																
Guidelines																
approved	Х															
Syllabi																
developed,																
submitted to																
councils for																
approval			Χ	Х		Χ	Χ									
Artifact																
assigned and																
collected												Χ	Χ		Χ	Χ
Formation,																
training of																
Assess																
Team III														Χ		Χ
Artifacts																
assessed				L										Х		X
A 1' ('			ı	Fa	culty	/-gui	ded	Rese	earch	1						
Applications																
for Pursuit																
Grant submit/ select			V			V						V			V	
Pursuit Grant	Х	-	X	Х	Х	X	Х	Х	X	Х	Χ	X	Х	Х	X	Х
Undergrad	\vdash		^	^	^	^	^	^	^	^	^		^	^	^	
Res Festival	Х			Х			Χ			Х			Х			Х
Eval/recomm							^									
allocation of																
resources for																
fac reassign.																
time									Х	Х		Χ	Х		Χ	Х
				F	acu	Ity D	evel	onm	ent							
Plan <i>Pursuit</i>					454	, 0	3 7 6 10	Pini								
Institute,																
select/notify																
fellows	Х			Х			Х			Х			Х			Х
QEP Pursuit																
<i>Institutes</i> led																
by external																
facilitators		Χ			Χ			Χ			Χ			Χ		

	Pil	ot	١	ear '	1	Y	ear 2	2	Y	ear :	3	Y	ear 4	4	Yea	ar 5
Task	Pilot Year	Sum 2011	Fall 2011	Spring 2012	Sum 2012	Fall 2012	Spring 2013	Sum 2013	Fall 2013	Spring 2014	Sum 2014	Fall 2014	Spring 2015	Sum 2015	Fall 2015	Spring/Sum 2016
Brown	Libra	ary L	_2L:	Lear	n to	Lea	rn S	upp	ort f	or Q	EP a	nd C	COR	E		
Mobile Learning Catalog App	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	X	X
Mobile Learning Email Support	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	X	Х
Mobile Learning Podcast Tutorials			Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Mobile Learning QR2 Codes			Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Embedded Librarians CORE courses	Х	X	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	X	Х
Course Tab for CORE 110			Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	Х
Course Tab for CORE 120			Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	Х
Course Tab for CORE 220			Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Course Tab for CORE 320				Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	Х
Course Tab for Capstone						Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х
Learning Commons	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Learning Studio		X	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х
Digital Commons						Х	Х	X	Х	Х	Х	Х	Х	X	X	Х

	Pi	lot	,	Year	1	١	ear 2	2	Y	ear 3	3	Y	ear 4	1	Yea	ar 5
Task	Pilot Year	Sum 2011	Fall 2011	Spring 2012	Sum 2012	Fall 2012	Spring 2013	Sum 2013	Fall 2013	Spring 2014	Sum 2014	Fall 2014	Spring 2015	Sum 2015	Fall 2015	Spring/Sum 2016
Eval	uati	on of	As	sess	men	ts a	nd R	epoi	rts b	y Pu	ırsui	t Tea	am			
Review CORE 110																
SAILS assess																
results;																
recommend as																
needed		Χ			Χ			Χ			Χ			Χ		Х
Review CORE																
220 assess;																
recommend as																
needed					Χ			Χ			Х			Х		Χ
Review CORE 320																
SAILS assess																
result; recommend																
as needed																
Review																
Capstone																
assess																
recommend. as								V			V			V		\ \ \
needed								Χ			Χ			Χ		Х
Review apps for																
Pursuit Grant, Fac/student																
travel	Χ			Х			Х			Х			Х			Х
Collect/evaluate,	^			^			^			^			^			
& report info from																
Student																
Research																
Journals,																
Pursuit Grant																
Assess, and																
Assess of Proj					Χ			Х			Х			Х		Х
Annual																
Evaluation of																
Pursuit; submit																
report to Provost					Χ			Χ			Х			Χ		Χ
Draft SACS 5-yr																\ \ \
Interim Report																X

9. Organizational Structure

The organizational structure of ACU's QEP is designed to successfully implement and sustain the *Pursuit* Initiative.

A **Director of** *Pursuit* will be appointed to oversee the program initiative, including the budget (see Appendix VI for a job description). The *Pursuit* Director, serves on the SACSCOC Leadership Team, but has direct responsibility to the Provost's Office. The Director will provide coordination and oversight to all aspects of the *Pursuit* Program to ensure successful and coordinated implementation. The Director of *Pursuit* will supervise the Administrative Coordinator, and other QEP *Pursuit* staff, as needed.

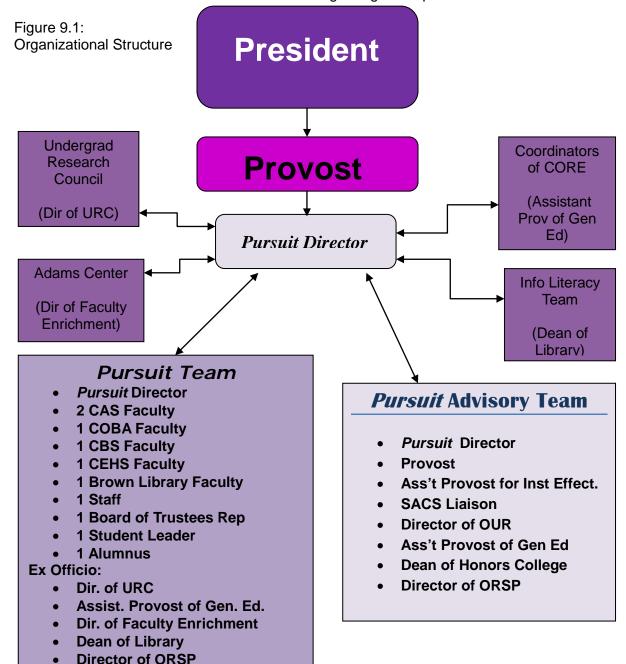
The **Director of** *Pursuit* works collaboratively with several significant groups on campus:

- The Undergraduate Research Council, a group that organizes and facilitates the University's Annual Undergraduate Research Festival. This campus-wide event highlights student research, scholarship, and creative work. Prizes are awarded for the competitively reviewed projects. Judges are chosen from faculty and other professionals on campus.
- The Adams Center for Teaching and Learning, charged with planning and implementing professional development activities for faculty. The Director of Faculty Enrichment provides consultation to the Director of *Pursuit* for activities needed for successful QEP outcomes. Adams Center provides an on-campus venue for faculty development with state-of-the-art technology, a large classroom facility, and an area for serving lunches and refreshments.
- The Coordinators of CORE courses, who provide input and coordination for the new general education core curriculum. The Director of *Pursuit* will work with the directors and faculty to ensure student learning outcomes are included in curriculum and assessed through general education assessments. The Director of *Pursuit* will collect artifacts from CORE 110 and CORE 220 classes for assessment teams.
- The Information Literacy Team, composed of the faculty from Brown Library, Adams Center staff, and other interested faculty involved in student research. The library faculty, in conjunction with the Adams Center and the Director of *Pursuit*, provide opportunities for students and faculty to acquire or enhanced information literacy skills. This will be accomplished through a variety of methods, including website links, podcasts, and other methods currently in development. Assessment will be found within Core Curriculum classes.

The *Pursuit* Advisory Team is responsible for advising the Director of *Pursuit*. The advisory team meets monthly, as needed, and is responsible for monitoring progress and modifications of the plan. The team is composed of interested constituents within the University, including the Provost, Assistant Provost for Institutional Effectiveness, the SACSCOC Liaison, Director of the Office of Undergraduate Research, the Assistant Provost of General Education, the Dean of Honors College, and the

Director of Office of Research and Sponsored Programs.

The *Pursuit* Team is responsible for implementation of the *Pursuit* Initiative and for advising the Director of *Pursuit*. The Team reviews and evaluates assessment results and makes recommendations for changes, as appropriate. The Team also reviews applications and selects faculty for QEP *Pursuit* Institutes, and recommends funding awards for faculty and student travel to conferences. The *Pursuit* Team (faculty involved in student research and mentoring, staff from areas directly affected by the QEP, student leaders, Board of Trustees Representative, and the Director of *Pursuit*) promotes the *Pursuit* Initiative and disseminates information regarding the implementation.



10. Identification of Necessary Resources

Abilene Christian University is committed to realistically estimating and allocating costs of the physical and human resources necessary for implementing and sustaining the Quality Enhancement Plan. This commitment is evidenced by

- Organizational structure which identifies roles and support from various academic resources:
- Support mechanisms for all phases of the initiative;
- Clear **financial plans** and **detailed multi-year budget** necessary to implement, sustain, and complete the initiative.

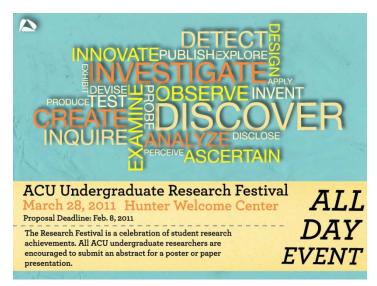
10.1. Organizational Structure

Organizational structure, found in section 8, describes the academic alignment needed for support the QEP from critical academic groups. Management of the QEP is addressed within this organizational structure so that the necessary resources are clearly identified.

- The QEP Pursuit Advisory Committee is comprised of the administrators responsible for the academic programs involved in the QEP. These include the Provost, the Assistant Provost for Institutional Effectiveness, the SACSCOC Liaison, the Director of the Office of Undergraduate Research, the Assistant Provost of General Education, the Dean of the Honors College, and the Director of Research and Sponsored Programs. This committee provides advice and input to changes
- The Director of *Pursuit* is directly responsible to the Provost for operation and completion of QEP goals. The President and the Provost give approval for significant changes in the operational and budget plans for the QEP.
- The Pursuit Team is responsible for the implementation of the QEP plan under the leadership of the director. The team is comprised of faculty representatives from all colleges, a student, a member of the Board of Trustees, an alumnus, and several ex officio members. The Pursuit Team ensures the day-to-day functioning of the initiative. This team coordinates Pursuit Institutes, including the selection of facilitators for the institutes and the application and selection of faculty fellows; the Pursuit Team also makes recommendations for awards of travel funding for faculty and students. (See Section 8 for a more detailed description of Pursuit Team duties.)
- Working alongside the Pursuit Team are four vitally important groups to the QEP: the Undergraduate Research Council, the Adams Center for Teaching and Learning, the Coordinators of CORE, and the Information Literacy Team. These groups are vital to the implementation of the QEP and assist in sustaining the goals and learning outcomes for Pursuit.

10.2. Resource Support Mechanisms

The QEP calls for the building of a research community within the University. The vision for assembling this community is sustained through various centers of support on



campus. These centers do not require the addition of any new faculty nor do they add to faculty workload. They currently include the following centers and services:

The Undergraduate
Research Council provides
students with the opportunity to
participate in real-world, handson research in a variety of
fields. Students work directly
with faculty members on
research projects that often
result in publication in scholarly
journals and will give you

experience prized by employers and graduate schools (see <u>Undergraduate Research</u> or <u>http://www.acu.edu/academics/undergradresearch/index.html</u> for more information).

The Writing Center. A free service located centrally on the main floor of the Brown Library, The Writing Center works with hundreds of students and members of the Abilene community every year. Whether students need assistance in brainstorming a topic, outlining their papers, searching for scholarly resources, or reading over and cleaning up their finished product, The Writing Center offers trained peer tutors to help work through their entire writing process. Tutors help students learn how to read their own papers with an eye toward editing and revising, from strength of argument and cohesion of ideas down to punctuation and proper citation style, The Writing Center helps give students the skills to become better writers.

The Speaking Center. When a research project requires a speech or conference presentation, students and faculty alike are welcome to utilize the resources and tutors available in The Speaking Center. Speaking Center tutors are trained to help clients overcome performance anxiety and fear of speaking in public, and offer thoughtful critiques and suggestions for improving any presentation, from delivery techniques and PowerPoint presentations to argument strength and arrangement. There are also private practice rooms where students can record, time, and watch themselves, with or without a tutor. Faculty are welcome to visit The Speaking Center, as well, whether for feedback on their own presentations or assistance in crafting an assignment with a speaking component and developing a rubric by which to grade their students.

The Learning Studio. The Learning Studio is a resource on campus to help both students and faculty communicate through technological means. The Learning Studio is the place for all ACU constituents to come in order to both While The Speaking Center offers help with PowerPoint, the Learning Studio is where students and faculty can go for help beyond traditional technology presentations. There are recording booths for capturing and uploading podcasts, computers and tutors to help with Apple's iLife suite, spaces for recording expert interviews, and editing bays for editing self-made movies with Final Cut Pro. There are also high-speed and high-quality computers which are available for HD projects, and the tutors in the Learning Studio are trained to assist with all of the resources offered. With a recent \$1.8 million grant from AT&T, the Learning

Studio will continue to grow in its ability to support the students and faculty of ACU. Whether that is recording a podcast or thinking through the design of a PowerPoint or a poster for a conference, the Learning Studio should have people able to help.

The Adams Center for Teaching and Learning. While The Adams Center does many things, it may be best described as a faculty think tank and development center. The main goal of the Adams Center is to enhance the learning environment of the university, with the emphasis on the learners, not the educators. With this in mind, The Adams Center looks to integrate new technologies into the classroom in thoughtful ways, bringing together faculty members to suggest new ideas, present on conferences attended, and provide feedback and constructive criticism on ways in which technology can be effectively utilized in the classroom. Essentially every noon hour throughout the school year there is a faculty event where all faculty are welcomed to hear their peers present ideas, discuss implications and possibilities, and share a meal. The Adams Center has both traditional and more creative collaboration and conference spaces which provide a space for new ideas about learning theory and education to be conceived, developed, and ultimately put into practice. The Adams Center encourages faculty to dream of new ways to engage students in the classroom, then gives them the tools and support to bring that dream to reality.



The Library Research Center. The Library Research Center is staffed by trained librarians. These librarians provide instruction to faculty and students to assist clients in the use of online databases and appropriate search strategies for successful completion of research projects. Library faculty are working to implement changes in their support for the QEP

and CORE classes through implementation of a new, innovative program entitled L2L: Learn to Learn.

10.3. Plan for L2L: Learn to Learn -- Brown Library's Support for QEP and CORE

In support of ACU's QEP of research literacy, to be carried out through the CORE curriculum, Brown Library is offering a program of service called "L2L: Learn to Learn." The area below describes the elements of the L2L program. The program will be utilized to assist Core Curriculum courses and provide services to facilitate QEP student learning outcomes for faculty and students. Many of the services are already in place thanks to a grant, but some support services are in development. The QEP budget includes an initial funding amount of \$5,000 for start-up costs and an annual \$1,000 budget item to assist in updates for services. An implementation timeline for these

elements is included in **Section 8. Timeline for Implementation**.

Interfaces. CORE students and faculty experience the library through three interfaces:

- 1. Mobile learning: mobile-friendly apps link the researcher to library collections, tools, and services.
- 2. Embedded librarians: librarians are present in CORE classes in person and on course tabs and links.
- 3. Tri-Commons: the library provides three Commons spaces for collaborative teaching and learning: the Learning Commons, the Learning Studio, and the Digital Commons.

Types of support. CORE students and faculty experience three types of support in use of the library's collections:

- 1. Personal support: knowledgeable faculty provide one-on-one assistance in research.
- 2. Technological support: descriptions, devices, programs, and apps for discovery are available.
- 3. Space support: physical and virtual spaces (Commons) where students and faculty may interact and communicate with each other as part of the learning process; general and private study areas.

Combinations of types of support. The Learning Commons on the main floor of Brown Library provides personal support in a resource-rich, technologically supported, collaborative space emphasizing use and production of texts. The Learning Studio on the third floor of Brown Library accomplishes support for tasks emphasizing the use and production of audio and video materials. The Digital Commons is the central virtual repository where various communities of authorship, from very informal to formally peer reviewed, can work and where their work can be collected and preserved as part of the University's intellectual output, such as theses and dissertations, honors projects, film festival films, proceedings of the undergraduate research festival.

Promotion. L2L will be promoted beginning with CORE 110, where there will be a spotlight speech and week. The CORE 110 web page will link to the library L2L page. L2L will have its own logo that will be used throughout the entire CORE sequence to indicate library support for each CORE course. Each CORE course will have an L2L tab where the library assigned to that section can offer research support.

Visual Representation of the L2L Support

Figure 10.1

L2L: Library Support Combinations for CORE

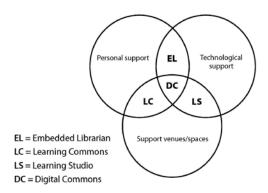
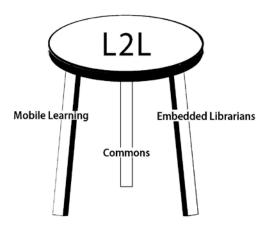


Figure 10.2

L2L: Library Interfaces with CORE students and faculty



10.4. Financial Plans

As the University began its second century of educating students, the need for a Christian university focused on challenging academics and leadership preparation was described in ACU's 21st Century Vision (see 21st Century Vision or http://www.acu.edu/aboutacu/vision.html for information). The vision states:

To attract more Christian scholars among the student body and faculty, ACU will significantly strengthen our most distinctive programs and **develop new**, **innovative programs** in the coming decade. Partnerships with corporate America and the nonprofit sector will provide uncharacteristic **opportunities for student research** and hands-on learning. ACU will invest in a fully-developed Honors college and create highly-attractive academic programs that set the university apart. (p. 3) [emphasis added]

It is with this vision in mind that the university created its new general education curriculum. The new curriculum has taken over 6 years to plan and develop. It is within this curriculum that the foundational skills defined the QEP will be delivered. Plans for the implementation of the new general education curriculum require commitments from faculty across the university. Workload issues have been addressed from the beginning of the plan. New faculty have been added in departments to compensate for faculty teaching in the Core Curriculum classes. The human and fiscal resources necessary to implement the Core Curriculum have been allocated in the strategic plan budget.

QEP funding for resources for faculty mentoring, *Pursuit Grants*, and *Pursuit Institutes* are provided from funds that have been allocated as part of the university's annual budget development process. These are incrementally new dollars to the university and a portion of these new dollars have been designated to fund the QEP.

These new dollars will fund a significant portion of the financial needs through years one and two (>80% of the anticipated financial need through year two). The balance will be funded via additional new dollars or by reallocation of existing budget dollars.

The QEP is a high priority for the university as is the funding for this plan. We are committed to securing the necessary financial resources for this plan. Actual experience will inform our funding approach for the later years of the plan as we continue assessing the financial needs of the QEP and identifying sources of funds to meet those needs (i.e., capturing incrementally new dollars, reallocating existing dollars or some combination thereof).

Funding for the QEP begins the first year with a budget of \$174,000, increasing to a final yearly budget of around \$527,000. This budget includes an average yearly increase of around \$88,000.

10.5. Detailed Multi-Year Budget Narrative

A detailed multi-year budget spreadsheet can be found in Appendix IV. A budget narrative for the different budgeting categories is briefly described below:

Personnel/benefits and Related Support

\$88,492/year

- a) QEP Director—\$2,000/semester stipend and a summer stipend for extra summer duties, 2/9 of ½ of salary, based on a 9-month contract (See below in d) Benefits).
- b) **Administrative Coordinator**—part-time clerical support for QEP duties (See below in d) Benefits.) \$12,000/year
- c) Redirected Time for QEP Director and Expanded Role of OUR Director—QEP Director: 1/2 FTE--½ of \$55,000 average salary for new assistant professor (based on 9-month contract); Expanded Role of OUR Director: 1/2 FTE (up from ½ FTE) because of expanded role in changing focus from traditional research to include creative activities as well (See d) Benefits). \$45,250/year
- d) **Benefits---**30% benefits for positions a, b, c above

\$20,375/year

e) Assessment Analyst/Web Developer/Graphic Design Support

\$200/year

Faculty

\$53,000 to \$372,500/year

- Resources for purchase of reassigned time for faculty in multiple departments involved in mentoring or addition of new faculty beginning in Year 3 \$71,500 to \$214,500/year
- b) **QEP Pursuit Institutes**—Each May, an institute in the Adams Center will be designed for a QEP focus. Faculty are selected through a competitive application process to redesign previous courses or plan new courses that include student learning outcomes consistent with QEP goals. Faculty will attend the institute, plan or rework a course syllabus, design assessments, teach the course during the academic year, then bring course assessments to evaluate the course objectives to a May Institute at the end of the academic year. \$1000 will be awarded to each faculty member for up to 10 faculty \$10,000/year
- c) **Speakers/Consultants for QEP Institutes**—fees for external facilitators. \$3,000/year
- d) **Pursuit Grants** for research proposals—Three areas available for funding all under one grant proposal:
 - **Faculty Funding**—Each January, faculty may submit a proposal for a *Pursuit Grant*. Funding may be used for release time or for expenses related to research or creative activities with students. Funding for the

release time will be transferred directly to department/college to hire relief instructors as needed. Funding for expenses will be awarded through a restricted fund with receipts required to document expenditures. These grants will be awarded on a competitive basis, much like the Cullen and Math/Science Grants, beginning in Year 1.

Year 1: 5 grants of \$5,000 each;

Year 2: 10 grants of \$5,000 each;

Year 3: [max # of awards] 15 awards @ \$5,000/yr = \$75,000

Student Funding:

- Student Academic Year Stipends—Each January, faculty may submit a proposal for a QEP Grant for students to work with them doing research or creative activities. During the academic year, students may earn \$1,000/semester for research or creative work with a faculty mentor. This funding is in addition to the faculty funding. Faculty members may apply to receive funding for student researchers up to \$2000 for one academic year (\$1000/semester). A maximum of four student researchers will be funded from any one department. Final award payment is made when student has turned in final research report/creative project and assessments.
- Student Summer Stipends—For summer research, a maximum of \$2,000/student with \$8,000/department may be awarded on a competitive basis up to a maximum of 5 departments, beginning in Year 3. Final award payment is made when student has turned in final research report and assessments.
 \$40,000/year
- Equipment/Supplies—up to \$1,000/proposal beginning in Year 3 \$15,000/year

Programs \$5,000 to \$3,800/year

- a) **Journal Editor stipend**—In order to promote dissemination of student work, a link on the ACU website will highlight students and departments involved in research: their work the faculty mentor, and other relevant information, beginning in Year 2. 5 hours/week workload @ \$7.00/hr for \$2,500/year
- b) Information Literacy modules--\$5,000 initial cost for technological assistance and support for Brown Library L2L with annual revisions costing \$1,000 each year \$5,000 to \$1,000/year

Space/Equipment for QEP Office

\$8,000 to \$200/year

- a) Computer/copier/furniture--equipment necessary to equip a new office.
 \$7,000 initial cost
- b) Paper/**office supplies**/printing costs—Start-up costs of \$1,000 with a yearly budget of \$200. \$1,000/\$200/yearly

Training/Travel

\$4,000 to \$24,000/year

- a) **Faculty travel to conferences** with students making presentations of scholarly or creative products beginning Year 2 10 awards @ \$1000/proposal=max of \$10,000
 - b) **Student travel**—Students accepted to regional and national conferences to make presentations about their research or creative products may apply for travel funds, beginning in Year 2. \$1,000/student with max of \$10,000/year
 - c) The QEP **Director trave**l to SACSCOC, CUR, or AAC&U conferences 2 conferences per year @\$2,000/conf \$4,000/year

Assessment

\$10,500 to \$33,000/year

a) **SAILS**-purchased assessment

\$3,000/year

b) **Assessment Teams**-A faculty assessment team formed with 5 faculty to work together for a period of 5 years with a stipend for compensation.

\$1500/faculty member × 5/team

Assessment Team for 1 st year Data	\$7,500/year
Assessment Team for 2 nd year Data	\$7,500/year
Assessment Team for 3 rd year Data	\$7,500/year
Assessment Team for 4 th year Data	\$7,500/year

Marketing

\$4,500 to \$5,000/year

- f) **QEP--**\$4500 of new funds and \$4,500 of re-directed funds during the first year, with \$3,000 succeeding years. \$4,500/first year then \$3,000/year
- g) **Undergraduate Research Festival**-- beginning Year 3, additional \$1,000 added to funds provided in 21st Century Vision Budget for OUR, increasing \$500/year \$1,000/year 3; \$1,500/year 4; \$2,000/year 5

Miscellaneous \$500/year

Expenses for committee meetings, assessment training, etc.

Summary

Identification of personnel time, money, and material as necessary resources is important for a successful and sustainable budget. Continual assessment of the financial resources needed to successfully implement and sustain the QEP will help us identify ongoing funding needs. Identifying these needs will inform how we secure funds to meet these needs and while the focus will be on securing new dollars to fund this plan in later years, funding through reallocation of existing dollars remains a viable option as well.

11. Comprehensive Assessment Plan

ACU values a culture of assessment that is both comprehensive and pervasive. As the QEP is implemented into this culture of assessment, evaluation of the QEP will focus on how well we are changing the overall goals of the plan, with focused attention given to student learning outcomes.

EXPLORE: Students will acquire information literacy competencies and skills at both the basic and more advanced research levels through exploration and inquiry.

SLO 1.1 Students will understand and appropriately use scholarly sources.

CORE 110

Objective 1.1.A Students will determine the nature and extent of the information needed.

Measurement: SAILS sections ONE through FOUR

Acceptable Target: All freshmen in CORE 110 will take the SAILS instrument before week three. These data serve as the pretest for information literacy. The SAILS is readministered in CORE 320 (junior year) and it is anticipated that the section scores will increase to match or exceed institutional type scores.

Ideal Target: The increase in the SAILS pre to post scores for these sections will exceed institutional type scores.

Measurement: EXPLORE 110 Rubric ITEM ONE "Determine the extent of information needed." CORE 110 requires each student write an evaluative essay meeting specific requirements. This essay is scored using the EXPLORE 110 Rubric.

Acceptable Target: 70% of the samples scored by faculty Assessment Team 1 using the *EXPLORE 110 Rubric* ITEM ONE will average 2.5 or higher.

Ideal Target: 80% of the samples scored by faculty Assessment Team 1 using *EXPLORE 110 Rubric* ITEM ONE will average 2.5 or higher.

Objective 1.1.B Students will access needed information effectively and efficiently.

Measurement: SAILS sections FIVE and SIX

Acceptable Target: All freshmen in CORE 110 will take the SAILS instrument before week three. These data serve as the pretest for information literacy. The SAILS is readministered in CORE 320 (junior year) and it is anticipated

that the section scores will increase to match or exceed institutional type scores.

Ideal Target: The increase in the SAILS pre to post scores for these sections will exceed institutional type scores.

Measurement: *EXPLORE 110 Rubric* ITEM TWO "Assess the needed information"

Acceptable Target: 70% of the samples scored by faculty Assessment Team 1 using *EXPLORE 110 Rubric* ITEM TWO will average 2.5 or higher.

Ideal Target: 80% of the samples scored by faculty Assessment Team 1 using *EXPLORE 110 Rubric* ITEM TWO will average 2.5 or higher.

Objective 1.1.C Students will use information ethically and legally.

Measurement: SAILS section SEVEN and EIGHT

Acceptable Target: All freshmen in CORE 110 will take the SAILS instrument before week three. These data serve as the pretest for information literacy. The SAILS is readministered in CORE 320 (junior year) and it is anticipated that the section scores will increase to match or exceed institutional type scores.

Ideal Target: The increase in the SAILS pre to post scores for these sections will exceed institutional type scores.

Measurement: *EXPLORE 110 Rubric* ITEM THREE "Assess and use information ethically and legally"

Acceptable Target: 70% of the samples scored by faculty Assessment Team 1 using *EXPLORE 110 Rubric* ITEM THREE will average 2.5 or higher.

Ideal Target: 80% of the samples scored by faculty Assessment Team 1 using *EXPLORE 110 Rubric* ITEM THREE will average 2.5 or higher.

CORE 220

Measurement: EXPLORE 220 Rubric. CORE 220 requires each student write a research paper guided by assigned components. This paper is evaluated by trained faculty on Assessment Team 2 utilizing the EXPLORE 220 Rubric. Each subsection of the rubric is scored and there is a cumulative score for the rubric.

Acceptable Target: 70% of the students will score 3.0 or above on each of the seven components of the rubric AND

70% will have a composite score of 21.0 or higher.

Ideal Target: 85% of the students will score 3.0 or above on each of the seven components AND 85% will have a composite score of 21.0 or higher.

SLO 1.2 Students will integrate knowledge to frame researchable questions and to develop strategies to seek answers.

CORE 220

Objective 1.2.A Students will be able to describe major theories in the field relevant to a particular case, problem, or solution.

Measurement; A research artifact is assigned and collected in CORE 220 and assessed using the *EXPLORE 220 Rubric* ITEM FOUR.

Acceptable Target: 70% of the research artifacts (ITEM FOUR) will have an average score of 2.5 or higher.

Ideal Target: 85% of the research artifacts will have an average score of 2.5 or higher.

Objective 1.2.B Students will be able to describe findings and interpretations in the field relevant to a particular case, problem, or solution.

Measurement: The course's assigned research paper is collected in CORE 220 and assessed using the *EXPLORE 220 Rubric* on ITEMS FIVE and SEVEN.

Acceptable Target: 70% of the research papers will have an average score of 2.5 or higher on ITEMS FIVE and SEVEN.

Ideal Target: 80% of the research papers will have an average score of 2.5 across these items.

SLO 1.3 Students will analyze, interpret, and/or evaluate information and make and implement research informed decisions.

CORE 220

Objective 1.3.A Students will evaluate information and its sources critically and incorporate selected information into their knowledge base and value system.

Measurement: The research paper will be collected in CORE 220 and assessed using ITEM SIX in the *EXPLORE 220 Rubric*.

Acceptable Target: 70% of the research papers will have an average score of 3.0 on ITEM SIX.

Ideal Target: 80% of the research papers will have an average score of 3.0 on ITEM SIX.

Objective 1.3.B Students will use multiple sources effectively to accomplish a specific purpose/assignment.

Measurement: The research paper is assessed against the *EXPLORE 220 Rubric* ITEM SEVEN.

Acceptable Target: 70% of the research papers will average 3.0 on the ITEM SEVEN rubric.

Ideal Target: 80% of the research papers will average 3.0 on the ITEM SEVEN of the rubric.

CREATE: Students will create and produce new information as they write, present, and perform.

SLO 2.1 Students prepare, present, and assess the effectiveness of scholarly and creative products.

CAPSTONE

Objective 2.1.A Students will demonstrate effective use of information literacy skills through written communication.

Measurement: A writing assignment from discipline-specific Capstone experiences is evaluated using the *Capstone Rubric* ITEMS ONE and TWO. Individual rubric items and the sum score of the rubric are used in this evaluation.

Acceptable Target: Each individual item will have 80% of the papers average 3.0 on each item. 80% of the papers will score 80% of the total rubric score.

Ideal Target: Each individual item will have 85% of the papers average 3.0 on each item. 85% of the papers will score 85% of the total rubric score.

Objective 2.1.B Students will apply information to the planning and creation of a particular product or performance.

Measurement: A writing assignment from discipline-specific Capstone experiences is evaluated using the Capstone rubric ITEMS THREE and FOUR. Individual rubric items and the sum

score of the rubric are used in this evaluation.

Acceptable Target: Each individual item will have 80% of the papers average 3.0 on each item. 80% of the papers will score 80% of the total rubric score.

Ideal Target: Each individual item will have 85% of the papers average 3.0 on each item. 85% of the papers will score 85% of the total rubric score.

Objective 2.1.C Students will demonstrate critical thinking as they develop, produce, and evaluate a product or performance.

Measurement: A writing assignment from discipline-specific Capstone experiences is evaluated using the *Capstone Rubric* ITEMS FOUR, FIVE, and SIX. Individual rubric items and the sum score of the rubric are used in this evaluation.

Acceptable Target: Each individual item will have 80% of the papers average 3.0 on each item. 80% of the papers will score 80% of the total rubric score.

Ideal Target: Each individual item will have 85% of the papers average 3.0 on each item. 85% of the papers will score 85% of the total rubric score.

External to Class Setting

SLO 2.2 Students will conduct faculty-guided original work (with a faculty mentor) relevant to their field of study.

Objective 2.2.A Students engaged in faculty-guided work will be able to perform appropriate research steps in the development/creation of discipline-specific projects.

Measurement: Students will keep a *Research Activity Journal* that is graded by the faculty mentor using the *CREATE Rubric* ITEMS ONE, TWO, and THREE.

Acceptable Target: Each individual item will have 80% of the journals average 3.0 on each item. 80% of the journals will score 80% of the total rubric score.

Ideal Target: Each individual item will have 85% of the journals average 3.0 on each item. 85% of the journals will score 85% of the total rubric score.

Objective 2.2.B Students engaged in faculty-guided work will be able to draw sound conclusions from the results of the project in order to identify future directions (use of evaluated results).

Measurement: Students will submit an *Assessment of Project Report*. This report will be assessed using the *CREATE Rubric* ITEMS FOUR, FIVE, and SIX.

Acceptable Target: Each individual item will have 80% of the reports average 3.0 on each item. 80% of the reports will score 80% of the total rubric score.

Ideal Target: Each individual item will have 85% of the reports average 3.0 on each item. 85% of the reports will score 85% of the total rubric score.

. Operational Objective 2.2.C The number of faculty-guided research/ creative activity projects will increase within academic departments.

Measurement: All academic departments report the number and type of faculty-guided research and creative activity projects conducted on an annual basis. These data are reported in the Annual Assessment Cycle. Current baseline data is from two reports collected in the Office of Undergraduate Research Report (OURR).

Acceptable Target: All departments will report these data. The increase of faculty-guided research and creative activity will increase 50% across the institution by year five.

Ideal Target: There will be an 75% increase in the number of faculty-guided research and creative activities across the institution by year five.

EXPRESS: Students will express their research independent scholarly and creative work in a public setting.

Research Festival and Beyond ACU

SLO 3.1 Students will publicly disseminate independent scholarly and creative work in a public setting.

Objective 3.1.A Students will produce independent scholarly and/or creative products.

Measurement: Students producing scholarly or creative work for the Undergraduate Research Festival must submit abstracts describing the product. Faculty reviewers assess the abstracts

using the Review of Submitted Abstracts Rubric.

Acceptable Target: 80% of abstracts will have a 3.0 or higher on each item.

Ideal Target: 80% of abstracts will have a 3.3 or higher on each item.

Measurement: Students who received grants from the Office of Undergraduate Research, Honors College, or *Pursuit* Grants will submit a paper or creative work based on their project to their mentoring faculty member. Faculty members submit the reports to the *Pursuit Team*. Faculty reviewers will assess the work using *Writing Assessment Rubric*.

Acceptable Target: 80% of papers or creative work will receive a total score of 15 out of 25 points or higher on the rubric.

Ideal Target: 80% of papers or creative work will receive 20 out of 25 points or higher.

Measurement: Students who received grants from the Office of Undergraduate Research, Honors College, or *Pursuit* Grants will submit a self-assessment entitled *Research Project: Student Self Assessment* with their final report to their mentoring faculty member. Faculty members submit the reports to the *Pursuit Team*.

Acceptable Target: 80% of papers or creative work will receive a total score of 15 out of 25 points or higher on the rubric.

Ideal Target: 80% of papers or creative work will receive 20 out of 25 points or higher.

Objective 3.1.B Students will demonstrate professionalism in the presentation of scholarly and creative products beyond the classroom.

Measurement: Student work accepted to the Undergraduate Research Festival is assessed using the *Papers/Verbal Presentations Rubric* or the *Posters/Presentations Rubric*. Faculty scores the papers/poster products.

Acceptable Target: 70% of products/presentations will score 50 or higher out of total score of 90 on rubric.

Ideal Target: 80% of products/presentations will score 65 or higher out of total score of 90 on rubric.

Objective 3.1.C Students who present research projects and/or creative activities to audiences external to ACU will demonstrate professionalism in the presentation and contribute to the discipline.

Measurement: Evaluation forms from peer-reviewed conferences;

Acceptable Target: Using the baseline for these categories from 2010, each category will increase 25% from the baseline by the fourth year of the QEP and 35% by the fifth year.

Ideal Target: The percent of increase will be 30% by year four and 40% in year five.

Operational Objective 3.1.D An increase in the number of students submitting research projects and creative works to institutional, local, state, national, and international conferences and juried programs will occur.

Measurement: The number of submissions and acceptances is documented on an annual basis from department data found in TaskStream.

Acceptable Target: Using the baseline for these categories from 2010, each category will increase 35% from the baseline by the fourth year of the QEP and 50% by the fifth year.

Ideal Target: The percent of increase will be 40% by year four and 60% by year five.

Assessment Teams

Four assessment teams composed of 5 persons each will be formed to conduct the annual assessments. Four teams will assess performance of student learning outcomes as defined in each of the four rubrics: *EXPLORE 110 Rubric, EXPLORE 220 Rubric, CREATE Rubric, and Capstone Rubric.* The teams will work together for five years to provide consistency of scoring. Teams will train and make adjustments on the rubric, score the artifacts, summarize the findings, make recommendations, then submit the assessment information to the *Pursuit* Team (Implementation team). After reviewing the assessment findings and recommendations from the assessment teams, the *Pursuit* Team will write annual summary reports to the faculty and Provost.

SAILS Assessment

The Office of Institutional Effectiveness will review data from the SAILS, given to

students in the first year during CORE 110 and in the third year during CORE 320. A report will be submitted to the *Pursuit* Team for review and to the Provost.

Operational Objectives

Data for Operational Objective 2.2.C and 3.1.C will be collected from departmental Annual Assessment Cycle information found in TaskStream. The Office of Institutional Effectiveness will be responsible for collection and summary reports to the *Pursuit* Team and to the Provost.

EXPRESS Student Learning Outcomes

Data from the Review of Submitted Abstracts Rubric and the *Papers/Verbal Presentations Rubric* or the *Posters/Presentations Rubric* is collected by the Undergraduate Research Council. Copies of the scored assessments will be submitted to the Director of the QEP and the Director of Undergraduate Research to be summarized and evaluated. A report is submitted to the *Pursuit* Team. The *Pursuit* Team writes an annual report to the Provost of all collected data and progress for the QEP.

Summary

The implementation of the QEP will include scheduled, periodic assessment techniques to inform interested parties of its success and/or need for revision. Communication to faculty and academic administrators is essential for evaluation of progress, need for professional development, and modification of student learning activities. It is believed that the goals and student learning outcomes for ACU's QEP are worthy and ambitious, but that the plan is a living, growing, changing document that must adjust to fit the needs of the students, faculty, and University.

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13. APPENDICES

APPENDIX I. SELECTION COMMITTEE REPORT WITH IDEAS GRID

APPENDIX II. MARKETING PLAN AND ADS

APPENDIX III. SAMPLE RUBRICS APPENDIX IV. DETAILED BUDGET

APPENDIX V. PURSUIT GRANT APPLICATION

APPENDIX VI. DIRECTOR OF QEP JOB DESCRIPTION APPENDIX VII. CAPSTONE EXPERIENCE GUIDELINES

Appendix I Topic Selection Committee Report and Ideas Grid

Appendix I Selection Committee Report and Ideas Grid Abilene Christian University QEP Topic Selection Process – June 5, 2009

Committee Members

Gregory Straughn, chair – CAS, Music. Jeff Arrington – CAS, Physics. Rodney Ashlock – CBS, Bible, Missions and Ministry.

Orneita Burton – COBA, Management Science. Dana Hood – CEHS, Education. Jennifer Shewmaker – CAS, Psychology. Steven Moore – CAS, English. Lynette Sharp Penya – CAS, Communication.

Background

Selection of the three QEP topics was initiated in March 2009 and completed in June 2009. The members of the topic selection committee meet to discuss the best way to accomplish achieving our target of 2 to 4 topics suitable for the QEP. After reviewing samples of QEP proposals from a selection of cohort schools, it was decided that a series of face-to-face meetings with faculty members, staff and students would be an appropriate way to begin the process.

A series of six "Brainstorming Sessions" was setup through the Adams Center for Teaching Excellence, and faculty and staff from throughout the University were invited to participate. In addition, one meeting of the College of Arts and Sciences Chairs was devoted to the discussion of an appropriate QEP topic. Greg Straughn and one other selection committee member facilitated these meetings, and approximately 65 people attended and offered suggestions. These meetings represented a cross-section of the campus and included representation from every College as well as support staff from various academic and student life entities.

Jeff Arrington organized a group of eight students representing majors in the College of Arts and Sciences, College of Biblical Studies, and College of Business Administration. This meeting, on May 4, 2009, was the final focus group meeting of QEP selection process.

In early May 2009, the campus was invited to participate in a Zoomerang survey about the four topics that had emerged most frequently in the face-to-face discussions. 210 responses were received, including 190 free-responses to questions about the topics. The responses as well as the summary of the survey are included in this report.

Using results of the Zoomerang survey and notes from the face-to-face meeting, a QEP Ideas Grid was developed to help group like ideas into logical units. This grid is also attached. The selection committee met May 13, 2009 to discuss the results of the survey and brainstorming sessions and decided upon the three proposals that form this report.

Proposal Descriptions

PROPOSAL No. 1. Research Literacy Initiative. A campus-wide program that will provide opportunities for critical and creative thinking about discipline-specific issues through mentor-guided research and preparation, forums for public presentations, and feedback from faculty and external adjudicators.

PROPOSAL No. 2. Cultural Literacy Initiative. A campus-wide program that will provide opportunities to participate in other cultures and to reflect on one's location in the diversity of the American and global experience through semester-long and short-term domestic and foreign study.

PROPOSAL No. 3. Learning Studio Initiative. The Learning Studio seeks to provide students and faculty with the expertise, training, and technology they need to communicate effectively in the 21st century. Its proposed partners include: Digital Media Center – podcast recording and editing available to students/faculty; Media Collections – A/V services and resources from the Library; Speaking Center – student tutoring and practice facilities. QEP Ideas Grid

Appendix I Selection Committee Report and Ideas Grid QEP Ideas Grid

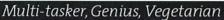
1	Capstone	Undergraduate Research	Writing Ability
<u> </u>	putting it all together into a Final Product speaking and writing about what they have read in their Capstone "connect the dots" across levels connect social, professional, and incarnational responsibility within a discipline-specific context	- realize earlier on that publishing paper is an advantage for grad school entrance - "senior thesis" – oral/written defense - define research as broadly as possible - include a portfolio of one's work - build on to existing Office of UG Research - need to address faculty workload when supervising individual research - research stipends for promising students	skipping Freshman English inhibits research potential peer editing is helpful need to move beyond collecting data of writing intensive classes into measurable improvement
	Study Abroad	Leadership	Technology
l	tutorial (one-on-one) structure advantageous changes one's worldview - immediate immersion - quick trip (2-3 weeks) BYU model (66% for semester, 33% short term) define "abroad" to include domestic as well connect with social justice/conflict resolution perception of the US in other global environs	 developing a full sense of one's confidence finding ways of creating and fitting into a niche servant leaders are those to whom people respond to well increase internship (local and regional) potentials 	fluency and ease of online searching using existing bibliographics effectively capitalize on existing Technology initiatives more student-driven app creation and usage could be failored to major-specific issues
	Civil Discourse	Career Success	Information Literacy
	help students be able to articulate what they believe in healthy ways exercising the right of dissent in respectful, well- articulated ways create a forum (virtual and physical) for free speech Peace and Social Justice major in Fall 09	appreciation) financial literacy and making good financial decisions examine how bad financial decisions have had negative impacts	 vetting sources is very important move beyond wiki/Google synthesizing information from a variety of creditable sources university-wide approach to plagiarism create products that demonstrate information discernment
	Learning Center builds on Writing Center in library include a more robust speaking center emphasize technological innovations - podcasting, presentation software	Spiritual Formation - should be more intentionally connected with Spring Break campaigns - reflective evaluation of volunteering - physical and mental health improved through intentional intersections of counseling center and REC center	Other repeated ideas: - reinstate a campus-wide speakers series - expand Common Readings to include all four cohort years

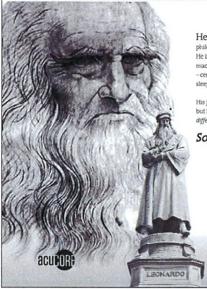
Appendix II Marketing Ads

Appendix II Marketing Ads

Print ads:







He was a painter, architect, musician, engineer, plulosopher and mathematician, just to name a few of his career moves. He invented bicycles, scissors and hydraulic pumps, and sketched flying machines, movable bridges, calculators and solar power in anuaring detail—centuries before they were actually developed. He worked days without sleep, yet took to years to paint Mona Lisa's lips. And he studied abroad.

His journey of research and creative expression lasted only 67 years, but **Leonardo da Vinci** continues to outlive his life, making a real difference in the world.

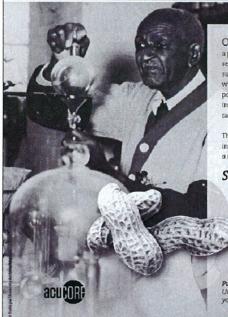
So, what are you pursuing today?



Pursuit is the quality enhancement plan (QEP) of Abilene Christian University that begins Fall 2011. To learn how Pursuit will enhance your ACU education, visit acu.edu/pursuit.

George Washington Carver

Botanist, Humanitarian, Peanut Enthusiast



One of 11 siblings born to slaves, carver observed a problem – the monoculture of cotton in the agrarian South – and set out to discover a solution. With cotton depleting the soil and susceptible to infestation, an alternative was needed. Enter Carver, who researched and promoted crops such as peanuts and sweet potatoes. His concoctions made from peanuts circulated widely and improved the lives of many. He also mentored children, worked to ease race relations, painted, wrote poetry, and shattered racial stereotypes.

The accomplishments of "Black Leonardo" were widely lauded in his time, but Carver continues to outlive his life, making a real difference in the world.

So, what are you pursuing today?



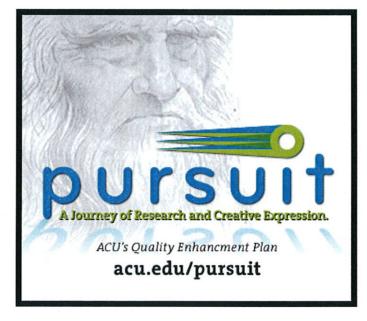
Pursuit is the quality enhancement plan (QEP) of Abilene Christian University that begins Fall 2011. To learn how Pursuit will enhance your ACU education visit acu edu/pursuit



ACU's Quality Enhancment Plan

acu.edu/pursuit





Appendix III Sample Rubrics

	Exemplary (4)	Kemplary (4) Competent (3) Developing (2) Beginn	Developing (2)	Beginning (1)	Score
Determine the extent of information needed Obj 1.1.A	Effectively defines the scope of the research question or thesis. Effectively determines key concepts. Types of information (sources) selected directly relate to concepts or answer research questions.	Defines the scope of the research question or thesis completely. Can determine key concepts. Types of information (sources) selected relate to concepts or answer research question.	Defines the scope of the research question or thesis incompletely (parts are missing, remains too broad or too narrow, etc.) Can determine key concepts. Types of information (sources) selected partially relate to concepts or answer research questions.	Has difficulty defining the scope of the research question or thesis. Has difficulty determining key concepts. Types of information (sources) selected do not relate to concepts or answer research questions.	
Access the needed information Obj 1.1.B	Accesses information using effective, well-designed search strategies and most appropriate information sources.	Accesses information using variety of search strategies and some relevant information sources. Demonstrates ability to refine search.	Accesses information using simple search strategies retrieves information from limited and similar sources.	Accesses information randomly, retrieves information that lacks relevance and quality.	
Access and use information ethically and legally	Students use correctly all of the following information use strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrates a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.	Students use correctly three of the following information use strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrate a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.	Students use correctly two of the following information use strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrates a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.	Students use correctly one of the following information use strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrates a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or	

Writing Assessment Rubric

Student:			Reviewer:		
number which I	the paper will be based on t best describes the paper. Pl ualities of both neighboring o	ease	note that even numbers ca	ın be	used to show that the
1. Orga	nization and Content (20%)				
	5	4	3	2	1
	Superior and carefully organized response to the topic. Each paragraph as a controlling idea and excellent supporting detail.		Acceptable to good response to the topic. Each paragraph has a controlling idea that is adequately supported by detail.		Inadequate response to the topic because of any of the following: a controlling idea is not stated or not sufficiently supported; ideas are confused or disconnected; blocked communication.
2. Dictio	n and Style (20%)				
	5	4	3	2	1
Fluent style, sophisticated word choice, excellent tone, and outstanding sentence variety. Moderately clear style, an adequate range of word choice, unclear tone, or poor sentence structure. Ineffective style, limited word choice, unclear tone, or poor sentence structure.					
3. Lang	uage Use and Mechanics (2	(%0%		,	
	5	4	3	2	1
	Complete command of standard English. Few, if any, errors in grammar, punctuation, or usage.		Moderate command of standard English. Errors in grammar, punctuation, or usage do not seriously interfere with a reader's understanding of the paper.		Little command of standard English. Major errors or repeated minor errors in grammar, punctuation, or usage interfere with a reader's understanding of the paper.
4. Disci	pline-specific Content (40%))			
	10	8	6	4	2
	Appropriate depth to the topic. Discipline-specific statements are accurate. Complete and clear justification of discipline- specific statements. Consistent and effective use of notation.		Moderate depth to the topic. Discipline-specific statements are mostly accurate. Major gaps in justification of discipline-specific statements. Use of notation is fairly consistent and relatively effective.		Little depth to the topic. Discipline-specific statements are inaccurate. Weak justification of discipline-specific statements. Inconsistent and ineffective use of notation.
/25_ Total	al for page				

Name:

	4	3	2	1
Questioning	My question is clear, well-focused and requires high level thinking skills in order to research.	My question is clear and well focused. My question requires moderately high level thinking skills.	My question is incomplete and unclear. My teacher needed to help me form a question.	I was unable to come up with a research question.
Planning	I made really good use of my time. I was able to remain focused on the tasks and make changes when I needed to. I was able to develop a clear method to organize my information. I was able to make revisions in my plan when needed.	I was able to work within the time frame my teacher gave me. I was able to develop a system to organize my information. I was able to make revisions with help from my teacher.	I needed teacher help to list and organize what I needed to do. There are some steps missing in my planning. I made revisions with teacher help.	I was unable to come up with an organized plan and work within the time limits.
Gathering	I used a variety of resources and carefully selected only the information that answered my question. I was able to continually revise my search based on information I found.	I used many resources to find information that answered my question. I tried at revising my search, but had some problems doing so.	I used 1 or more sources. Original question or focus guided my search, although I should have made revisions. I made errors in selection of references.	I lost focus during the gathering process and therefore my information was not accurate and complete.
Sorting	I thoroughly selected and organized information that answered my question in a organized way. I selected information that was appropriate.	question without	I tried to organize the information I found, but I made some mistakes. I wasn't able to completely stay focused on information that would answer my question.	I was unable to sort and organize the information I found to answer my question.
Synthesizing	I used the information I found in a meaningful way to create an original product that clearly answers the question with accuracy, detail and understanding.	My product answers the question in a way that reflects learning using some detail and accuracy.	My product is not complete and only answers part of the question.	My product is incomplete and contains missing details and it isn't completely accurate.

Appendix IV Detailed Budget

Appendix IV Detailed Budget

Operational Expenses	2011-2012	7	2012-2013	Five	Five-Year QEP Budget	<u>о</u> .	Budget 2014-2015	7	2015-2016	цз	5-yr Total
737 Personnel/benefits											
QEP Director \$	10,667	↔	10,667	↔	10,667	ક્ક	10,667	63	10,667	₩	53,335
Administrative Coord \$	12,000		12,000	↔	12,000	↔	12,000	69	12,000	↔	60,000
Redirected Time for QEP Dir and OUR Dir \$	45,250		45,250	↔	45,250	↔	45,250	↔	45,250	G	226,250
Benefits for QEP Dir/Ad Coord/ OUR Dir \$		↔	20,375		20,375	↔	20,375	↔	20,375	↔	101,876
sessment Analyst/Web Developer/Database manager \$	200	↔	200	↔	200	↔	200	↔	200	ь	1,000
Personnel/benefits Total \$	88,492	₩	88,492	↔	88,492	6 3	88,492	₩	88,492	49	442,461
Faculty											
Resources for Reassigned Time/New Faculty				↔	71,500	↔	143,000	↔	214,500	↔	429,000
Faculty Incentives											
QEP Pursuit Institutes \$	10,000	↔	10,000	↔	10,000	↔	10,000	₩	10,000	↔	50,000
Speakers/Consultants for Pursuit Institutes \$	3,000	↔	3,000	↔	3,000	↔	3,000	₩	3,000	₩	15,000
Pursuit Grants for faculty-mentored research											
Faculty funding \$	25,000	↔	50,000	↔	75,000	↔	75,000	↔	75,000	↔	300,000
Student Academic Year Stipends \$	15,000	↔	15,000	↔	15,000	↔	15,000	↔	15,000	69	75,000
Student Summer Stipends				↔	40,000	↔	40,000	₩	40,000	↔	120,000
Equipment/supplies				↔	15,000	↔	15,000	↔	15,000	↔	45,000
Faculty Total \$	53,000	↔	78,000	↔	229,500	4	301,000	₩	372,500	49	1,034,000
Programs											
Journal editor stipend		↔	2,500	↔	2,500	₩	2,500	₩	2,500	₩	10,000
Information Literacy modules \$	5,000	↔	1,000	↔	1,000	6 9	1,000	↔	1,000	↔	000'6
		₩	3,500	₩	3,500	ઝ	3,500	₩	3,500	↔	19,000
Space/EquipmentQEP Office											
computer/copier \$	3,000									€>	2,000
Phone/paper/supplies \$	1,000	ક્ક	200	↔	200	↔	200	↔	200	₩	1,800
Space/EquipmentQEP Office Total \$		49	200	₩	200	⇔	200	↔	200	₩	8,800
Training/Travel		,		•		•	0	•	0	٠.	000
Faculty travel to conf with students		()	10,000	()	10,000	•	10,000	,, (10,000	<i>A</i> (40,000
		69 €	10,000	59 €	10,000	≯ 6	10,000	, 0	000,01	A G	40,000 20,000
			4,000		4,000	9 (4,000) (000,4	→ €	000,04
Training/Travel Total \$	4,000		24,000	₩	24,000	₩	24,000	s a	24,000	A	100,000

Appendix IV Detailed Budget

Assessment											
SAILS			3,000	↔		↔	3,000	↔	3,000	↔	15,000
Assessment Team for First Year Data	\$ 7,500	& O	7,500	↔		↔	7,500	↔	7,500	₩	37,500
Assessment Team for Second Year Data			7,500	↔		↔	7,500	↔	7,500	↔	30,000
Assessment Team for Third Year Data				↔	7,500	↔	7,500	↔	7,500	₩	22,500
Assessment Team for Fourth Year Data						↔	7,500	↔	7,500	↔	15,000
Assessment Total	\$ 10,500	\$	18,000	69	25,500	₩	33,000	↔	33,000	₩	120,000
Marketing											
QEP	\$ 4,500	\$	3,000	↔		↔	3,000	↔	3,000	↔	16,500
Undergraduate Research Festival				↔		↔	1,500	↔	2,000	₩	4,500
Marketing Total			3,000	↔		₩	4,500	6 3	5,000	₩	21,000
Miscellaneous Expenses	\$ 50	\$	500	₩	200	₩	200	G	500	(/)	2,500
Yearly Totals	\$ 173,992		215,692	↔	375,692	€	455,192	↔	527,192	↔	1,747,761
Incremental New Money	\$ 173,992 \$	2	41,700	₩	160,000	6	79,500	6 7	72,000	છ	527,192

Pursuit Grants

Abilene Christian University is a university where scholarly activity and innovation are valued and encouraged. Many undergraduate and graduate students are adding to the body of knowledge for their discipline through facultymentored research. These grants are being implemented in order to increase the number of students working with faculty in undergraduate research projects.

Purpose

The purpose of the competitive Pursuit Grants program is to enrich student learning, support faculty development, and enhance quality and reputation of academic programs by providing funding to support student and faculty research, external research grants, and promote research presentation and publication. Funding may be used to conduct research* or creative endeavors. Proposals must document faculty partnerships with student(s) in all phases.

*Note: All Institutional Review Board (IRB) protocols must be met before conducting research. Contact the Office of Research and Sponsored Programs (ORSP) for more information regarding research proposals and IRB approval.

Selection

Grants will be awarded by a competitive selection process with proposals for research opportunities to be evaluated and selected by the *Pursuit Team* a committee of faculty from various disciplines (no less than 5 members chaired by QEP Director; Director of Undergraduate Research, and members from all colleges). Preference will be shown to proposals exhibiting a high level of engagement for student researchers.

Goals

- 1. Increase faculty mentoring of students in research and creative activities.
- 2. Promote research publication and presentation.
- 3. Increase student opportunities for research and creative expression.

Funding—Three Areas Available—One Grant Proposal

Faculty Funding. Funding will be provided for either release time or for expenses related to research or creative activities. Funding for release time will be transferred directly to department/college to hire relief instructors as needed. Funding for expenses will be awarded through a restricted fund with receipts required to document expenditures. A limited number of grants will be awarded to exceptional projects up to \$5,000 per project.

Student Funding. At least one undergraduate research assistant must be integrally involved in the proposed scholarly or creative activity. Note: the funding is in addition to the faculty funding. Faculty members may apply to receive funding for student researchers up to \$2,000 for one academic year (\$1,000/semester) and \$2,000 for the summer. A maximum of four undergraduate student researchers will be funded from any one department. Equipment Funding: \$1,000 is available for equipment and supplies.

Outcomes

The *Pursuit Grant* is intended to be directly linked to research programs that provide outcomes in the forms listed below. Recipients must demonstrate progress toward these outcomes. Please note that ALL recipients must have students present at the Undergraduate Research Festival or other juried campus forum.

- 1. Submission of a proposal to present with undergraduate researchers at a professional conference
- 2. Submission of a paper/creative product jointly produced with undergraduate researchers for dissemination in peer-reviewed forums

Application—IDEAS Grant Grants for Exceptional Research and Creative Products

Applicants should complete this form and send electronic copies to the Director of the QEP, their department chair, and their dean. The final hard copy should be sent to the Office of Provost, ACU Box 29103. Applications are due to these individuals no later than the second Friday in January by 12:00 pm.

Name of Applicant:	Date
Department:	Faculty Rank:
ACU Box	ACU Phone
Have you applied for or been granted other faculty this year? NO YES If so, what type?	development funds (excluding travel)
Will you have other funding/gainful employment du	ring this time? NO YES
Where will the research be conducted?	
Are you submitting this with another faculty member (Each must submit individually) If yes, with whom? Please explain what happens if only one of you is f	□NO □YES
Check grant package:	•
1 Faculty stipend for research with undergrad spring, summer) semester, beginning	duate researchers for the (fall,, 20
2 Faculty load reduction of hours during beginning, 20 (cost of relief ins	the (fall, spring, summer) semester, structor)
3 Research expenses during the (fall 20 Be sure to include these in a detailed budget attack	(\$)
4Undergraduate Research Assistants for the semester, beginning, 20	e (fall, spring, summer)

Undergraduate Research Assistant Stipend requests

J				
1	search Assistant – Name, assification	Semesters of Research	Role	\$/researcher
Oie	essification	1103041011		
Tot	tal money requested for proje	ct:		
	nat benefit might research ass It apply, rank the benefits, and			s project? Check all
	Valuable experience	almost certai	nly	possibly
	_ Mentoring	almos	st certainly _	possibly
	_ Co-presenter at conference	almost	certainly	possibly
	_ Listed as co-author	almos	st certainly _	possibly
	_ Listed in acknowledgement	salmos	t certainly	possibly
	Oral or written mention at c	onference presen	tation	
		almo	st certainly _	possibly
	Oral and written skills	almost certa	inly	possibly
	Problem-solving skills	almost certa	inly	possibly
	_ Collaborative skills	almo	st certainly _	possibly
Other	:			

Title of Proposed Study:	
Abstract of proposed study (approximately 200-300 w	ords)

Please describe your project below.

- 1. Purpose, goals, and objectives
- 2. Significance of this project
- 3. Brief review of literature
- 4. Research methods or creative plan
- 5. Role of students in participation in the research and creative project
- 6. Description of final scholarly product from this project, including a description of student(s) engagement
- 7. Detailed budget, including narrative for clarification

I agree to abide by the terms of the proposal and the ACU Guidelines if this award is granted. I also agree to complete all assessment tools, including the interim report, the final report, and process all budgets (if expenses are involved). I have read and agree to the terms in the University's Intellectual Property Agreement (see the Office of Research and Sponsored Programs website http://www.acu.edu/orsp)

Faculty Signature:	Date:
Department Chair Signature:	Date:
Dean Signature:	Date:
Director of QEP Signature:	Date:

Appendix VI QEP Director Job Description

Appendix VI QEP Director Job Description

Director of QEP/Pursuit Initiative

Reports to: Provost

Classification: Faculty, Half-time Director of QEP (11 months*)

Date:

Job Summary: The QEP Director facilitates and oversees the implementation of the university's Quality Enhancement Plan (QEP). The director will work with administrators, instructors and support staff to achieve and evaluate the desired outcomes of the QEP. The QEP Director holds a faculty position and will be expected to teach two courses per semester. The Director will collaborate with the Director of Undergraduate Research, the Assistant Provost of General Education, and CORE faculty to incorporate QEP instructional material into CORE classes; collect assessments from CORE classes; and coordinate QEP Assessment Teams. The QEP Director will work closely with faculty, departments, colleges, and other University offices to realize the vision of the QEP/Pursuit Initiative. The QEP Director will be held accountable for these obligations as they contribute to the attainment of the mission of the University.

Duties and Responsibilities: This person is responsible for ½ time work for two months in the summer and willing to:

- Provide leadership for the development, planning, implementation, and assessment of the Pursuit Initiative;
- Supervise the work of the initiative and monitor progress toward achievement of the initiative goals and program outcomes on an annual basis;
- Manage the budget, including the submission of *Pursuit Grant* funding and Keystone Institutes for course redesign or improvement;
- Advise on human resources for implementing the QEP;
- Chair QEP Steering Committee, serve on SACSCOC Leadership Team;
- Serve as liaison between the QEP Advising Team work with the Director of Office of Institutional Effectiveness to help facilitate the flow of information and assessments;
- Assist in coordinating the development, review, and revision of publications, publicity, and other community relations activities, including maintenance of comprehensive Web site promoting faculty and student research;
- Monitor SACSCOC QEP standards and ensures ACU is in compliance;
- Maintains all records and data on the initiative and coordinates the production of the annual and fifth-year report;
- Promote the mission of Abilene Christian University to all faculty, staff, students, alumni, and community at large;
- Promote effective working relationships among faculty, staff, and students; and,

Appendix VI QEP Director Job Description

· Complete other duties as assigned.

*compensation for summer work to be based on faculty member's 9-month salary

Knowledge, Skills, and Abilities: The successful director will have knowledge of curriculum development including knowledge of student learning outcomes and assessment. In addition, the applicant must exhibit:

- Effective verbal and written communication skills, excellent leadership and administrative abilities and experience;
- Demonstrated ability to complete multiple assignments, meet deadlines;
- Sufficient knowledge of research literacy components; and
- Mastery of discipline academic expertise.

Qualifications: Earned doctorate or other advanced degree in an academic discipline; educational preparation in accordance with the requirements of Abilene Christian University and the Southern Association of Colleges and Schools Commission on Colleges; evidence of effective teaching and scholarly activity.

Appendix VII Guidelines for Capstone Experience

Core Curriculum Implementation Team (CCIT) Recommendation for the Senior-Year Integrative Capstone Experience

"In addition to other discipline-related course goals, the senior-year integrative capstone experience will challenge the student to critically analyze, reflect, and write about the major discipline from the perspective of Christian Worldview" (Liberal Arts Core Curriculum at ACU, p. 6.).

While it is understood that the senior-year integrative capstone experience will vary widely across the disciplines including a specific course or cluster of courses, it is important that there be some common elements across major fields of study. Each department will submit to the UGEC its plan for implementing the Capstone experience.

Students who complete their senior-year capstone integrative experience should have demonstrated the following student learning outcomes:

- Habits of mind that foster integrative thinking between the liberal arts core curriculum and their major field of study.
- Achievement and demonstration through advanced research and/or creative projects the ability to frame
 questions, carry out critical analysis, and produce work of substantial complexity and quality related to
 their chosen field of study.
- Reflect and demonstrate their ability to think critically, globally, and missionally about their discipline.

The student learning outcomes for the upper level integrative capstone experience may be accomplished using a wide variety of assignments, projects, internships, research, performances, presentations, or other products; however, the following products are required of each senior-year integrative capstone experience and will contribute to the calculation of grades:

- A required paper with a minimum length of 2000 words (approximately 7 pages) and worth a minimum of 10% of the grade for the course in which it is included. This paper provides an opportunity for a summative assessment of the student's information literacy skills, including the proper citation of a minimum of five appropriate sources that support their research.¹
- An assignment of significant substance that demonstrates the student's ability to think critically about faith and vocation: Christian calling as it is expressed in a particular discipline. This paper or artifact is to be posted in the student's e-portfolio.²
- An annotated resume reflecting the student's accomplishments, co-curricular activities, service, and leadership. The resume will include reflections on the significance of these activities and how the student's invovlement has shaped his/her career path. The resume will be posted in the e-portfolio.

Options to satisfy this prompt could include a traditional research paper that might expand word count and cited sources; a reflective essay that accompanies a senior art show or recital, describing elements of the creative process; or a business plan that incorporates market research and analysis with the proposal of a specific entrepreneurial venture.

² Unless otherwise specified by the degree plan, this requirement will be met by the fifth General Education Bible Requirement: Christian Vocation and Mission.