QUALITY ENHANCEMENT PLAN (QEP) PROGRAM PROPOSAL

BY

Joseph C. Loon, PhD

“A QEP BASED ON A COMPREHENSIVE UNIVERSITY THEME IN A STUDENT LEARNING PARADIGM USING CUTTING EDGE TECHNOLOGY”

v.2

BRIEF DESCRIPTION

The University adopts a comprehensive theme of sustainable development, which is supported by EVERY academic course in every college and department. To “sustain” means to perpetuate over time, and a good definition of sustainable development is development which meets our present needs while protecting the needs of future generations. Focusing on sustainable development means focusing on our local environment and on the world we live in and on the world which we want to live in. This means that every course in our curriculum will be connected to the real world and therefore every course will be connected to every other course. Students learn that every course they take at the university is connected with every other course. They also learn that they did not come to the university to collect courses for a diploma, but rather they came to learn how to learn. The student learning paradigm shifts the activity from the institution providing quality instruction to student learning. Students learn more in a learning environment than in an instructional environment. The power is in the learning environment. In the learning paradigm, the students are in a discovery and knowledge construction mode. About 80% of all the data collected in the world has a location component — that is, it occurs at some known place on the earth. Because its location is known, it can be mapped, and therefore it can be spatially analyzed. Cutting edge technology, which can do this is a Geographic Information System (GIS). A GIS is a collection of computer hardware, software, and geographic data for collecting, managing, analyzing, and displaying all forms of spatially referenced information. All the above supports the defined mission, goals and principles of Texas A&M University-Corpus Christi (TAMU-CC).

SUPPORT OF INSTITUTIONAL MISSION, GOALS, AND PRINCIPLES

The vision of TAMU-CC states that it is committed “....to becoming one of the leading centers of higher education in the Gulf of Mexico region while serving the intellectual, cultural, social, environmental, and economic needs of South Texas. As a result, Texas A&M University-Corpus Christi will invigorate and strengthen the region and state through its educational programs, research initiatives, and outreach efforts.” The response to the definition of sustainable development mentioned above has given rise to the emerging field of sustainability science, which encompasses the concept of meeting fundamental human needs while preserving the life support systems of planet Earth. Sustainability science applied to South Texas and connected to the rest of the world clearly supports this vision and in addition, it supports the mission of TAMU-CC which “...is devoted to discovering, communicating, and applying knowledge in a complex and changing world.” Part of the mission statement of TAMU-CC is to prepare “...students for lifelong
learning and for responsible participation in the global community." This is exactly what a university theme of sustainable development will do.

The Harte Research Institute (HRI) is a strong research center of excellence located on the campus of TAMU-CC. One of the aims of the HRI is to generate and disseminate knowledge of the Gulf of Mexico ecosystem. This proposal will fit in well with this vision. In addition, the goals and objectives of the HRI include “to establish partnerships and alliances with educational, governmental, nongovernmental, and private sector organizations interested in long-term sustainable use and conservation of the Gulf of Mexico” and “to develop a Gulf-wide Geographic Information System.” This proposal fits in well with these objectives, and the assumption is that a lot of the environmental data to be used in this proposal will be supplied by the HRI.

TAMU-CC has developed ten goals. These are given below with those parts addressed by this proposal underlined in red:

1. A student body, of more than 10,000 students, which is representative of the demographics of the State of Texas and a corresponding increase of faculty and staff to support the students.
2. A faculty dedicated to the **continuous improvement** of teaching, learning, scholarly research, and creative activity.
3. A statewide reputation for an exemplary undergraduate education, anchored by an **integrated core curriculum** and learning communities.
4. Recognized master’s degree programs that enable students to be leaders in their fields and/or to continue their education at the doctoral level.
5. Strong doctoral programs, which include degrees in a discipline related to the Harte Research Institute for Gulf of Mexico Studies, education, computer science, and clinical psychology, bringing the institution to the doctoral intensive institution classification
6. An enhanced research mission and a growing international reputation for research focusing on the Gulf of Mexico, early childhood, geographic information systems, and reading education.
7. Collaborations with independent school districts, social agencies, public broadcasting, businesses, community colleges, medical schools, and other entities to provide access to lifelong learning and technological resources so that Texas A&M University-Corpus Christi is considered to be a leader in establishing successful partnerships, particularly to benefit the community.
8. An intellectual and cultural climate that inspires South Texans through the South Texas Institute for the Arts, the Performing Arts Center, and other cultural programs
9. Programs for students, faculty, and staff to develop leadership, collegiality, and university involvement.
10. Access to the array of information resources and technology infrastructure necessary to support university programs, services, and research

The overarching concepts and implementation of this proposal will be made to fit in with the Institutional Objectives of TAMU-CC, which are:

- Recruiting, retaining, and supporting a diverse, highly qualified student body, faculty and staff.
- Establishing a culture of professionalism and responsibility
- Fostering free and open intellectual inquiry, accomplishment, and expression.
- Ensuring respectful, fair, and equitable treatment of all individuals
- Fostering an open, shared, and participatory decision-making process
- Promoting efficient and effective use of time, resources, and technology.
- Providing an active campus life that extends teaching and learning beyond the classroom.
- Providing a safe and secure campus environment for students, faculty, and staff.
- Involving the university community, alumni, civic and government leaders, and other friends of the university in the Texas A&M University-Corpus Christi vision and mission.
About 80% of all the data collected in the world has a location component. That is, they have a geospatial position on earth. This geospatial position means that the data can be mapped and analyzed. The cutting edge technological tool for doing this is a Geographic Information System (GIS), which has been mentioned a few times above. A GIS can be described as a collection of computer hardware, software, and geographic data for acquiring, managing, analyzing, and displaying all forms of geospatially referenced information. Simple (but powerful) GISs are now available for free download. The student working with a GIS needs to understand the capabilities of the system and the nature of the data to be analyzed. But the power of this system is the student, the thinking explorer. Of great importance in a learning environment is what is going on in his/her mind while collecting, analyzing, synthesizing, visualizing, and making decisions using the GIS. There is no course being offered at TAMU-CC, which cannot make use of a GIS. Teachers and instructors will need to understand (and to be flexible about) the fact that solutions coming from the use of GIS can vary – there is no one right answer, just as we find in the real world.

ENHANCEMENT OF STUDENT LEARNING OUTCOMES

It is safe to describe TAMU-CC as mainly a Teaching Paradigm Institution. Instruction is delivered to students; the transfer of knowledge is from faculty to students; the accent is on the improvement of the quality of instruction and achieving access for diverse students. The concepts of a Learning Paradigm Institution are to produce learning; to let students elicit discovery and construction of knowledge; to improve the quality of learning; and to achieve success for diverse students.

In this proposal each student will learn about sustainable development in every course. Aside from the fact that this knowledge will eventually benefit our planet, students will learn and experience the inter-connectedness of all the courses they are taking. Too often we find students taking a bunch of courses in order to get a degree, and they do not learn how the knowledge from these courses is related.

BUILDING ON EXISTING PROGRAMS

Everything mentioned above builds on existing programs at TAMU-CC. We simply need to decide on a new azimuth for student learning in our institution. We need to come to the conclusion that learning is student centered and controlled and that learning environments and learning are cooperative, supportive and collaborative.

SPECIFIC GOALS OF THIS QEP

One of the main goals of this proposal is to enhance the quality of the students graduating from TAMU-CC by putting the emphasis on learning. Choosing a theme, which can relate to all our courses and using cutting edge technology will demonstrate to our students their learning abilities and the relevance of their studies to real-world problems. It has been shown above that this proposal is in line with and supports the vision, mission, goals and principles of TAMU-CC and the HRI.

EVALUATION AND ASSESSMENT OF THE QEP

Quantitative assessments can be done by looking at student grades (if this will still be the method of judging the passing of a course). Another form of quantitative assessment can
be one final semester exam for every student. Qualitative assessments can be made by interviewing students on their learning experience; by interviewing faculty; by studying faculty-student interaction in a course; and by studying faculty-student interaction across courses. Cross-discipline and cross-department interactions between faculty and students could be observed and reported on. In many of the courses the students will work on some real-world problems and their solutions to these problems can be assessed by faculty outside the courses (for example, research faculty at the HRI) or by personnel in government and nongovernment organizations. It does not seem to be an overwhelming task to develop new mechanisms to evaluate and assess the quality of this proposed program.

RESOURCE REQUIREMENTS

The main resource requirements will be the training of faculty and administrators in the concepts, techniques, and applications of

1. Sustainable development;
2. The Learning Paradigm University;

It is estimated that item 1 can be done partly in-house and partly by running workshops by visiting experts; item 2 will probably need workshops by visiting experts; and item 3 can be done by our in-house expertise.

This proposal may take a year to prepare and will need the time commitment of a dedicated cadre of faculty.

18th February, 2008