## LEQSF(2007-11)-ENH-PKSFI-PES-04

## "Mentoring at McNeese State University (McMentor)"

**PI:** Luther Stevenson

**Lead Institution: McNeese State University** 

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- I. Proposal Narrative (Without Appendices)
- II. Contract Work Plan
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## **Proposal Narrative (without appendices)**

# COVER PAGE FOR POST-KATRINA SUPPORT FUND INITIATIVE PRIMARILY EDUCATION SUBPROGRAM PROPOSALS BOARD OF REGENTS SUPPORT FUND. FY 2006-07

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Name of Lead     (Include Branch	Institution of Higher Educ n/Campus/Other Compon	cation: Mc	Neese State University		
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4. Title of Propos	ed Project: Mentorin	g at McNeese State	University (McMentor)		
5. Funds Reques	\$6,500	ESIP (Year \$52,710	1 only):	Total Project Request: \$163,010	6. Proposed Duration: (Circle # of Yrs.) 1 2 3 (4) 5
7. Name(s) of Pa	rtnering Institution(s):				
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#### **PROJECT SUMMARY**

Name(s) of Lead Institution (Include Branch/Campus and School or Division) and Partnering Institution(s):

McNeese State University

Address of Lead Institution: Box 90655

Lake Charles, LA 70609

Principal Investigators: Dr. Luther Harold Stevenson III

Title of Project: Mentoring at McNeese State University (McMentor)

Abstract (DO NOT EXCEED 250 WORDS):

The McNeese State University program will originate in the Department of Biological and Environmental Sciences and extend to other departments in the Colleges of Science and of Engineering and Technology. The focus of the effort will be the strengthening of mentoring programs that are in existence and the creation of mentoring programs where none now exists. The foundation of this initiative will be two NSF-supported programs: Community Based STEM Education Initiative and Engagement in the Science, Technology, Engineering and Mathematics Disciplines. These programs will provide the operating structure to build mentoring programs serving biology, chemistry, and mathematics courses that constitute major roadblocks to student success across the campus. The financial support will allow the organization of sustainable peer and faculty mentoring. McMentor will organize a peer-mentoring program to serve as the first line of defense against student attrition in the "portal of entry" and "gatekeeper" courses in Biology, Chemistry and Mathematics. Academically superior students majoring in these departments and in the College of Engineering will be selected as peer mentors. Biology-, Chemistry-, and Mathematics-Education majors will also be used as peer mentors. Faculty mentors with strong interests in student learning and service will be recruited. In addition to providing help with specific courses, faculty mentors will attempt to motivate students, provide moral support, and in general, intervene constructively at a time of the student's life when moral support may be more important than anything.

(Form 2, rev.2006)

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## GOALS AND OBJECTIVES

The final goal to be reached by the end of the grant period is the establishment of a viable student-student peer mentoring program. The intermediate objectives that will result in the achievement of that goal are the creation of an office of student mentoring staffed by a director and a cadre of trained, effective peer mentors. The three courses that will serve as the vehicles for testing the development model are offerings that have been identified as "killer courses" by Noel-Levitz, a firm that provides enrollment management consulting for higher education.

"Killer courses" are those first- and second-year courses with significant rates of F and W grades. Three such courses that will be used to test and refine the mentoring design were selected because of they traditionally have had a strong negative impact on the retention and ultimate success of a significant number of first- and second-year students in STEM as well as non-STEM courses. The course offerings providing the focus of the program are Biology 101 (Introduction to Biology I), Biology 225 (Human Anatomy and Physiology I), and Mathematics 113 (College Algebra). The Noel-Levitz study revealed W+F rates of 62% in Biology 101, 60% in Biology 225, and 52% in Mathematics 113. In Biology 101, a successful program will reduce the rate to 25%. The historical rate of W+F of 60% in Biology 225 will be reduced to 38% by a successful program, and a reduction of the W+F rate in Mathematics to 35% will be considered a rousing success

#### **NARRATIVE**

#### Project Rationale and Structure

### (1) CONTEXT FOR PROJECT

McNeese State University is located in Lake Charles, a city that straddles Interstate Highway 10 in the extreme southwest portion of Louisiana. The university, which is a member of the University of Louisiana system, is a four-year regional institution serving primarily southwest Louisiana but also drawing a contingent of students from southeast Texas and south-central Louisiana. Smaller numbers of students come from almost every parish in the state, many states of the Union, and several foreign countries. The customary attrition rate for each entering cohort averages approximately 23% after year one and about 48% at the end of year 2. Approximately 28 percent graduate within a six year period. The undergraduate population during the fall term of 2006 was 7336. The demographics of those undergraduates were 76 percent white, 18 percent African American, 2 percent international, and the remaining 4 percent distributed among a variety of ethnic groups.

Undergraduate degrees are offered through the Division of General and Basic Studies and six academic colleges (College of Business, Burton College of Education, College of Engineering and Technology, College of Liberal Arts, College of Nursing, College of Science). The largest college at McNeese in terms of total majors is the Burton College of Education. Slightly more than 25 percent of the undergraduates are pursuing degrees in the science, technology, engineering and mathematics (STEM) disciplines.

The university underwent a significant analysis of recruitment and retention issues in the 2002-2005 timeframe with the guidance of Noel-Levitz, a firm that provides enrollment management consulting for higher education. Part of that analysis involved the identification of "killer courses," those first- and second-year courses with significant rates of F and W grades. Three of the courses identified as "killer courses" impacting the retention and ultimate success of a significant number of first- and second-year students are Biology 101 (Introduction to Biology I), Biology 225 (Human Anatomy and Physiology I), and Mathematics 113 (College Algebra). The Noel-Levitz study revealed W+F rates of 62% in Biology 101, 60% in Biology 225, and 52% in Mathematics 113. The direction of the proposed scope of work was informed by these data; if anything positive is to happen in the retention and graduation rates at McNeese, the rates of W+F in these three classes must be improved. The three classes highlighted above enroll both STEM and non-STEM majors. Following initial establishment of the infrastructure described below, the initiative will be expanded to other courses acting as gatekeepers in many STEM degree programs.

#### (2) PROJECT FOCUS

The project entitled "Mentoring at McNeese State University (McMentor)" will focus on the first two years of the college experience. The Department of Biological and Environmental Science (the department housing the biology program) and the Department of Mathematics, Computer Science, and Statistics (the department housing the information technology program) will serve as the originating units. The intent of McMentor is to bolster mentoring programs that currently exist and to create such programs where they do not exist. A mentoring and support culture that

is institutionalized and that continues following the termination of funding from the Louisiana Board of Regents is the objective.

#### (3) PERSONNEL

The commitment of the faculty and the university administration to the creation of a mentoring culture at McNeese State University is self evident in the list of Principal and Co-Principal Investigators involved in this project and in the commitment of the university to earmark funds for the perpetuation of the program following the exhaustion of Board of Regents financial support. The list of individuals responsible for the program includes the Deans of the College of Science and the College of Engineering and Technology as well as the Department Heads of Biological and Environmental Sciences and Mathematics, Computer Science, and Statistics. The Principal Investigator holds a faculty appointment at the rank of Professor and the position of Director of the Quality Enhancement Plan at McNeese, a responsibility that has provided experience with institutionalizing a program that spans the entire university. The depth of the university commitment to McMentor is reflected in the leadership positions occupied by this team of Principal Investigators.

The Director of Mentoring will be a new position on the campus. The principals intend to retain someone at the master's level, preferably with counseling experience. The individual will have to have strong people skills because most of the job will involve working cooperatively with faculty, staff, and students.

The team of principals anticipates that peer mentors will be selected from individuals majoring in the subject-area education degree programs housed in the academic departments. For example, Biology Education is offered through the Department of Biological and Environmental Sciences and Mathematics Education and Computer Information Technology are offered through the Department of Department of Mathematics, Computer Science, and Statistics. This intent is a "two-for-one" proposition. Mentees receive professional assistance, and the mentors gain valuable training and teaching experience.

#### Work Plan

### (1) PROPOSED WORK

The first-year experience in college is important (Gardner, 2007). During the first year, students are required to make the transition from the high school experience to the higher education. At this time, the foundation is established to select a major field of study and a life's work, to set the pattern for grade performance, to develop positive study habits, and to explore the wider world. However, none of this matters if the student cannot succeed in the common portal-of-entry classes. In both STEM and non-STEM disciplines, biology and mathematics represent significant challenges when students enter McNeese. Poor grade performance or forced decisions to withdraw are major factors in decisions to depart.

The precarious position in which the majority of first-year students find themselves is abundantly apparent when only 38% of those attempting freshmen biology, 40% of those enrolled in anatomy and physiology, and 48% of those in college algebra earn a grade of D or better. Faced with these statistics, the academy has four choices: 1. Current practices based on academic

Darwinism can be continued with the miserable outcomes for the majority. 2. Standards can be lowered and grades inflated with greater undesirable consequences. 3. Instructional practices in the courses of interest can be modified to improve student learning. 4. Direct action can be taken to modify student behaviors and experiences that contribute to the current performance. We choose a direct action approach, peer mentoring of first-year students.

What is mentoring? A Google search using the key word "mentoring" yields 26.4 million sites. Adding "higher education" to the search cuts the list of sites to almost 2 million URLs. The greater than 90% reduction in the number of sites indicates that mentoring is more ingrained in the management of business and industry than in the academy of higher education. At McNeese, no organized or institutionalized program for mentoring exists. We propose to change that circumstance. For the purposes of our effort, a definition of mentoring has been modified from that used by the Free Management Library (www.managementhelp.org). Mentoring includes the activities conducted by a person (the mentor) to help another person (the mentee) succeed in college. Mentoring within the university environment might be called "academic coaching." In this document, the mentee is always a student.

The significance of a mentoring relationship (student-student or faculty-student) is not in doubt (Astin, 1999). The advice and assistance given by someone who has "been there and done that" is universally accepted as a positive experience for the one being provided assistance. The methods employed in this program are intended to facilitate the building of student-student relationships that will be meaningful in terms of the learning experience of the mentee. The limitations inherent in the proposed plan are to be found in two areas. One is the lack of a system to train peer mentors. The second is more serious and much more difficult to overcome: securing the involvement of mentees who could most profit from the proposed program of assistance. If the program can be operated effectively, there is no doubt that first-year students will have a more favorable experience in the portal-of-entry courses in a way envisioned by the principals. Furthermore, if our model is successful, our effort can easily be transported to other schools in the state.

## (2) PROJECT STRUCTURE

The project takes as its guiding principle the following: Students are uniquely positioned to help other students succeed. A cadre of trained student mentors drawn from among the elite academic leaders on our campus will form the core of this initiative. They will be trained in a semester-long course and then organized around a new staff position added to the campus community, Director of Mentoring. The Director of Mentoring will be funded initially through Board of Regents support then subsequently funded through state appropriations as part of the institutionalization of the initiative. The Director will report directly to the Vice President Academic Affairs within the administrative structure of the institution; however, the individual will be assisted in the performance of duties by the principals during the life of the Board of Regents support. Following the termination of Regents' support, the principals will be replaced by a standing faculty committee (the Mentoring Committee) drawn from the two colleges involved in STEM education. As the initiative matures and other campus units are incorporated, the standing mentoring committee will be expanded to include individuals from other colleges as part of the institutionalization process. The Mentoring Committee will function in a manner similar to a board of directors, ensuring continuing faculty input and control of the initiative.

The organization of McMentor will adapt the model developed by St.Clair (1994) for faculty to faculty mentoring. The seven elements as modified from St.Clair's list to promote student-student interactions are given below.

- 1. Institutional support from the upper-level administration is assured.
- 2. The program is operated by a designated person.
- 3. Mentoring is part of a comprehensive student-development initiative.
- 4. Participation is voluntary on the part of the faculty and the students.
- 5. Peer mentors are screened to determine fitness for assignment.
- 6. A monitoring system to determine progress and satisfaction is included.
- 7. Recognition is provided for the mentors.

#### Institutional support

Two powerful indicators of university support for the mentoring initiative are (1) the list of Co-Principal Investigators, which includes two academic deans and two department heads, and (2) the commitment of the university to provide funding from the regular university budget following the exhaustion of Board of Regents financial support. Securing participation by classroom faculty will be a priority following any award that may be forthcoming. The Quality Enhancement Plan prepared in association with reaffirmation of accreditation by the Southern Association of Colleges and Schools has provided an incentive that encourages faculty participation. In response to the Quality Enhancement Plan (QEP), the Vice President Academic Affairs has directed that activities that support the QEP be added to the Annual Performance Report used to evaluate the faculty. The following has been added to the APR in the Department of Biological and Environmental Science: "Leading special projects designed to engage students in academic pursuits outside of the classroom, documentation required." Participating in the mentoring program certainly fits under this category of items considered meritorious. All other departments in the university have been directed to make similar changes.

## Program operations

The day to day operations and the responsibility for executing a successful initiation and operation of McMentor will be the task of the Director of Mentoring, a new position created in the university in response to the mentoring initiative. The university does not maintain a long list of faculty members who are not fully engaged in the operation of the university. The assigning of a faculty member responsibility for McMentor in return for a reduction in teaching load is simply not an option with our over-committed faculty. The retention of an individual whose only responsibility is the health of the mentoring initiative is the only option, and the university is willing to make the necessary investment of resources to make the initiative a success.

## Comprehensive student-development initiative

McMentor is one part of a comprehensive effort dedicated to the development of students at McNeese State University. Two other parts include (1) a program directed at only students in the College of Science and the College of Engineering and Technology and the second (2) is an initiative that will impact every student in the institution. The college-specific program involves two companion initiatives funded by the National Science Foundation and dedicated to the

engagement of STEM students in the total university outside of the classroom (Community Based STEM Education Initiative (Com-STEM) and Engagement in the Science, Technology, Engineering and Mathematics (E-STEM)). The guiding principle of Com-STEM and E-STEM is fostering the development of competence through the engagement of the student in a host of non-classroom-related activities. The university-wide initiative is the Quality Enhancement Plan adopted by the institution. The statement of intent for the QEP is as follows: "After completing core curriculum and course requirements, students will have the foundation to write effectively and appropriately as required by their disciplines." Write to Excellence, the name applied by the university to the latter effort, will involve a series of one-credit courses called Freshman Foundations, a reorganized English 101 and 102 series, writing-enriched courses in the general education courses, significant writing in courses comprising the major and in the Capstone experience. Mentoring is going to be important in the second initiative.

#### Voluntary participation

Students cannot be force to participate in the proposed mentoring. Mentor-mentee relationships that are engage in by the unwilling do not work. Likewise, the faculty teaching the "killer courses" cannot be forced to urge the students in their classes to participate in the initiative. The common experience in a university is for students who really need the assistance available in mentoring, supplemental instruction or engagement to not avail themselves of the opportunity. This fact means that strenuous efforts will be required to achieve faculty and student buy-in and cooperation. Unless the faculty are creative in pushing the initiative, the help will go unclaimed. Deans and department heads will contribute significantly to the recruiting of faculty into the effort.

## Screening of peer mentors

The program design includes paying peer mentors a premium wage for our campus, sufficient training to make mentors effective, and assigning significant responsibilities to the mentors. The intent is to be so good at what we do that more students will apply to become mentors than we have resources to hire. In this way, the program can be selective in terms of who is hired. Students will be interviewed by the Director of Mentoring, the principals involved with the grant application, the instructors teaching the course for which mentoring will be done, and the office of Student Counseling.

## Monitoring system

The Director of Mentoring will be responsible for taking the temperature of the initiative on a continuous basis. Systems will be devised that allow feedback from mentees concerning the utility of the mentoring program, and mentors will gather on a weekly basis to share insights gained in the process of mentoring. Both mentors and mentees will have easy access to electronic technology equipped with the required software to provide on-line evaluation of both mentors and the programmatic aspects of McMentor.

### Recognition of mentors

The recognition of the efforts and ideas of the cadre of mentors will be an important component in building a culture of mentoring on campus in a way that student participation in the mentoring program will not be seen as an activity with a stigma attached. Mentors will be projected as facilitators of student success. Every conceivable avenue of positive student identification and

publicity will be executed in association with the office of Public Information at the university. Potential avenues of identification and publicity will include use of the flat-panel TV monitors available on campus, maintaining a presence on the McNeese Web page, and identifying Tshirts. The mentors will assume a leadership position in planning special student-centered events on campus through the Office of Student Services and will be identifiable participants on those events.

#### (3) PROJECT IMPACT

When the project improves the experience of first-year students in "killer courses" a larger segment of the student body will complete degrees leading to an overall positive association of students with McNeese. The enhanced rates of completion will be important to those students who would have otherwise departed higher education as they move into leadership positions in the community. However, that is not the most important impact.

The most important impact will result from the nurturing environment created by the peer mentoring culture that will develop. Eventually a natural mentoring community can develop without the strictures inherent in a "for-hire" program. Since the Burton College of Education is the largest unit on campus in terms of the number of majors and since the graduates of that college constitute a significant portion of the K-12 establishment, a mentoring culture will be incorporated at that level as our graduates practice on the job the habits learned at McNeese. When the program reaches maturity and involves many courses other than the three indicated, the regional workforce, largely led by graduates of McNeese, will settle into natural mentoring activities in the economic sector in which our graduates work.

## (4) PERFORMANCE MEASURES AND MILESTONES

The performance measures by which the success of McMentor will be judged will of necessity fall under three categories. One, the process objectives that monitor the establishment and execution of the initiative will reveal what steps have been taken by the program toward implementation. Second, the statistical objectives that monitor percentage of students in specific classes that earn a grade of C or better will inform discussions about the efficacy of the program in terms of improvement in the percentage of individuals that succeed in specific courses as opposed to the circumstance described earlier. Third, the assessment of what students actually learn in the basic science and mathematics courses represented by biology and college algebra, especially as learning is related to the core competencies required by the Board of Regents of graduates of higher education in the state of Louisiana.

#### Process timeline

Frankly, progress along all three lines of assessment will not be even or simultaneous. The principle underlying the establishment of the program will be: "Start small, think big, and grow as you go." The important milestones in the implementation of the program and process objectives will include the items listed below: 2007

Completion of job description for the Director of Mentoring July

Establish search committee to seek and select the candidate to fill the Director's

position

Retain the Director of Mentoring October

Establish the office of the Director

Establish relationship with the Chair, Department of Biology and the faculty November

group responsible for instruction in Biology 101 (first target for mentoring effort)

November Complete formulation of credentials required of candidates for mentors for

Biology 101. Successful students in the Biology Education program will be given

serious consideration.

Select five candidates to fill Mentor positions November

2008

January Pilot training of Biology 101 Mentors

Establish pilot mentoring program in four sections of Biology 101 utilizing facilities available in the Tutoring Center operated by the Division of General and

Basic Studies

Establish formal relationship with the faculty responsible for instruction in February

Biology 225

Develop criteria for selecting candidates for mentor positions for Biology 225. Successful students enrolled in the Biology Education program will be given

serious consideration

Recruit and select five candidates for mentors for Biology 225

March Establish formal relationship with the faculty responsible for instruction in

Mathematics 113 and the Director of Freshman Mathematics

Develop criteria for selecting candidates for mentor positions for Mathematics

113

Successful students enrolled in the Mathematics Education program will be given

serious consideration

Recruit and select 12 candidates for mentors for Mathematics 113

June

Formal classroom training for all mentors

August

Initiate full-scale mentoring programs for Biology 101 and 225 and Mathematics

113

November

Major review and assessment of the first full-scale mentoring effort Modification of plans, training and procedures based on assessment

Planning for expansion of McMentor to other courses

#### Statistical timeline

The second level of performance measures and milestones will involve an improvement of the outcomes in terms of the W+F rates in the three target courses in the core curriculum. Realistically, dramatic improvement in the performance level of students is not expected immediately. Since an organized mentoring effort is not in the student culture at present, there will be a lag phase as students adjust to the development of a culture of peer mentoring. The first attempt at full scale mentoring will occur in the Fall term of 2008. Modest returns from that effort are expected.

The expected improvement in the W+F rates are summarized below based on performance in the fall terms of each academic year. Grade performance during the Fall term is the best indicator of the efficacy of the program since the courses in question are heavily populated by first-year students.

Biology 101 W+F rat	es			
Historical = 62%,	projected: F07, 60%	F08, 55%	F09, 40%	F10, 25%
Biology 225 W+F rat	es			
Historical = 60%	Projected F07, 58%	F08, 55%	F09, 45%	F10, 38%
Mathematics 113 W+	F rates			
Historical = 52%	Projected F07, 50%	F08, 48%	F09, 45%	F10, 35%

#### Learning assessment

The third category of assessment will be conducted in association with the office of Institutional Effectiveness as part of the overall assessment of the core competencies associated with courses taken in fulfillment of the general education or core requirements. The selection of core competencies addressed by each course, the methods of assessment to be used, and the benchmarks associated with each core competency are being planed at this time in association with the reaffirmation of accreditation by the Southern Association of Colleges and Schools. Consequently, projected improvements related to the operation of McMentor are not possible at this time. However, mentor training will certainly include a segment on the core competencies related to each of the courses that are being targeted for improvement.

## (5) <u>SUSTAINABILITY AND SCALABILITY</u>

Tutoring on the McNeese campus is scattered and disjointed. The Division of General and Basic Studies tutors on a modest scale. The student athletes have an opportunity for tutoring through the athletic office. The Department of English and Foreign Languages offers writing assistance to students enrolled in English 101 and 102. Com-STEM offers tutoring to STEM majors who participate in that program. A writing center will be opened in association with the Quality Enhancement Plan to serve the needs of a campus-wide clientele. Now, McMentor seeks to assist students enrolled in specific "killer courses."

Under the leadership of the principals who originated this proposal, and with the stimulus provided by this proposal, an effort will be initiated to organize a consolidation of the tutoring and mentoring efforts under a university umbrella. Since the Director of Mentoring will be a continuing position, that individual could be designated as the Director of Mentoring and Tutoring and tasked with the responsibility of coordinating and/or consolidating services on campus. Likewise, the continuing director will be responsible for securing support from university, MSU foundation, financial aid, and grant sources to provide support for tutors and mentors. This proposal will leave a footprint on campus. This is an opportune time to consolidate, or at least coordinate services. The willingness of the university to assume the salary of someone to be a responsible advocate is an excellent sign of university support.

When the model proposed in this submission is refined, established and proven, several other entry-level "killer courses" become candidates to expand and continue the effort. Courses with a W+F rate in excess of 50% percent are Biology 102, Chemistry 101, English 101, History 101 and 102, and Mathematics 175 and 190.

#### Leveraging of Resources

Three different types of resources are being leveraged to provide support for the initiative outlined in this proposal: budget funds form the state appropriation, two significant federal grants to support the development of science talent, and campus reorganization in support of the Write to Excellence initiative developed from the institution's Quality Enhancement Plan.

Funds are requested to hire a Director of Mentoring at the MS level for \$35,000 plus 45% fringe (=\$50,750) for 2007-2008, and the 2008-2009, 2009-2010, and 2010-2011 the grant will pick up \$10,000 each subsequent year. The university will assist with \$33, 750 for those three years and the full amount thereafter. Traditional financial aid funds will be used after the initial period to support mentor positions. There are federal funds administered by the university. Likewise, there is a possibility of additional outside financial resources, often in the form of scholarships, being obtained through the McNeese Foundation.

The PI for this proposal is also associated with the two talent development grants currently awarded to McNeese State University from the Science Talent Expansion Program of the National Science Foundation. He serves as Co-PI on "Community Based STEM Education Initiative (Com-STEM)" and as PI on "Engagement in the Science, Technology, Engineering, and Mathematics Disciplines (E-STEM). Com-STEM serves as the organizing focus for this proposal and as a source of student talent that will be instrumental in the initial year of the request to the Board of Regents.

The PI of this submission currently serves as the Director of the Quality Enhancement Plan (QEP) for the university, a position that is also allocated university funds to the level of one-half of the salary of the PI plus travel and operating services support. But more importantly, service as Chair of the Faculty Focus Group that developed the concept being used in the enhancement plan and later as Director has provided unequaled access to the senior university administration. For example, he now sits on the SACS Leadership team with the university President, the Vice Presidents of Academic Affairs and Business Affairs, and the Chief Technology Officer. Access to the university leadership is an important resource.

The Risk: There is a risk involved with adopting a strategy based on altering student behavior. The faculty member who has attempted to hold voluntary review sessions for a science class has shared in a common experience of many: the students who really need the extra attention tend not to show up while the A-students come with religious fervor. If the A-B student with an ACT of 30 and majoring in engineering participates in the mentoring program as a mentee, that student will gain and go on to a professional life better equipped to be a leader in the company or group that is lucky enough to hire him or her. But, the reality is that such a student was going to graduate anyway, regardless of what the program does or does not do.

There is a possibility that marginal students with adequate but not impressive ACT scores will choose to stay away rather than to voluntarily access the opportunities provided by the program. Such students will not be touched by the peer mentoring experience. The student in that circumstance will not make the adjustments needed for success in college and therefore probably will go on to become another student who "attended" college but did not graduate. The risk that

students will choose the latter course of action certainly will be lowered by the recruitment aspects built into the operational plans of this submission. We are not unmindful of the risks; however, we are willing to accept the risk that some students will not engage. The risks are more than balanced by the enormous potential benefits of success embedded in the proposed plan.

Hurricane Katrina and Hurricane Rita: Since this grant opportunity is tied to the impact of Hurricanes Katrina and Rita, comments on the impacts of the two storms are appropriate. Hurricane Katrina was the greatest natural disaster to strike this country in our history, virtually destroying St. Bernard Parish, which constitutes the eastern side of metropolitan New Orleans, severely damaging three additional parishes, and depopulating New Orleans of 350,000 people who have not returned and probably will never come back. Had Katrina not occurred, Hurricane Rita, which struck Southwest Louisiana about a month later, would have been the greatest natural disaster ever to strike the state of Louisiana. Hurricane Rita severely damaged Calcasieu Parish (the home of McNeese State University); however, Cameron Parish located to the south of our parish simply ceased to exist as a populated area.

Slowly, people in southern Louisiana are rebuilding their homes, reconstructing their communities, and returning to work. However, the havoc brought by the twin storms has hurt the state at the top of the scientific and engineering pyramids as many M.D.s, P.E.s, and Ph.D.s left the state in response to attractive offers as others took advantage of our situation to draw away top talent. But the loss of the younger cadre of engineers, laboratory and industrial technicians, statisticians, chemists and computer scientists has been even greater. The College of Science and the College of Engineering and Technology, the originators of this proposal, will be central players in repopulating these ranks of the workforce as recovery proceeds. MSU needs to attract and hold more science and engineering undergraduates than ever before. An active mentoring program operated in association with other support for student development that has been provided to the two colleges will significantly enhance our ability to assist students through the academic process.

Tough times reveal strong people, and we have seen strong students, many of whom have lived through tragic personal situations, ready and willing to rebuild and renew their communities and recommence and rededicate their lives for the betterment of their home region and their state. The request set forth in this application will not only enable McNeese students the opportunity to return quickly to academic pursuits but also will enable the advancement and sustainability of desperately needed programs now and into the future. Truly, the timing of this application for mentoring support comes at an opportune moment for Southwest Louisiana.

## **BIBLIOGRAPHY**

- Astin, A. 1993. What Matters in College: Four Critical Years Revisited. Jossey-Bass, San Francisco.
- Astin, A. 1999. Journal of College Student Development. 40:518-529.
- Gardner, J. N. and B. O. Barefoot, 2007. Best practices in the first college year: Defining what works and why. National Conference on the First-Year Experience. Addison, Texas
- St.Clair, K. 1994. Faculty to faculty mentoring in the community college: An institutional Component of faculty development. Community College Review 22: 23-26
- Stevenson, L. H. 2002. This Is Your Ticket: Lessons In College Success. Louis Stokes Louisiana Alliance for Minority Participation, Southern University, Baton Rouge, Louisiana.
- Stevenson, L. H. 2002, 2003. Small Decisions Impact Retention and Graduation. Proceedings, 6<sup>th</sup> and 7<sup>th</sup> Annul SoE EPSCoR HRD and LS-LAMP Student Research Conference, Louis Stokes Louisiana Alliance for Minority Participation (LS-LAMP). Baton Rouge, LA

## PROJECT YEAR (CIRCLE ONE):

(1) 2 3 4 5 COMPOSITE

Title	of Proposed Research:	Mentoring at McN	eese State University	(McMentor)
Insti	ipal Investigator(s): tution(s) of Higher Edu	Dr. Luiner Harold	Stevenson III	
-11001	edcion(s) of Higher Edi	ication: <u>Wicheese</u>	State University	
I. <u>P</u>	ROPOSED BUDGET ESIP:			
Α.		Support Fund Money Requested*	Institutional Match**	Private Sector/ Other Match***
	1. Staff 2. Clerical	\$ 35,000	\$ 2,400 In-Cash	\$
	<ol> <li>Subtotal</li> <li>Fringe Benefits</li> </ol>	35,000	2,400 In-Cash	
	(% of A.3) 5. Graduate Asst.	15,750	480 In-Cash	
	<ul><li>6. Student(s)</li><li>7. Endowment(s)****</li></ul>	1,960		
	8. Subtotal A	\$ 52,710	\$ 2,880 In-Cash	\$
В.	Supportive Expenses:			
	<ol> <li>Travel</li> <li>Supplies</li> </ol>	\$	\$	\$
	<ol> <li>Consultants</li> <li>Rentals</li> </ol>			
	<ol> <li>Printing</li> <li>Equipment</li> </ol>			
	7. Other Expenses (Idea. Tuition & Fees	dentify)		
	b. Facility Rent 8. Subcontracts		2,000 In-Kind	
	9. Subtotal B	\$ 00,000	\$ 2,000 In-Kind	\$
C.	Overhead: 42.5% of Salaries	NOT PERMITTED	\$_16,728 In-Kind	s
TO	TAL PROJECT COST:	\$ 52,710	\$_21,608	\$

<sup>\*</sup>In the budget justification, distinguish between funds requested from the P-KSFI principal program and the Enhancement for Severely Impacted Institutions (ESIP). Note that ESIP funds may be used only at the institutions listed in Appendix A of this RFP.

<sup>\*\*</sup>Stipulate whether in-cash or in-kind.

<sup>\*\*\*</sup>The budget page(s) must reflect and the budget justification page(s) must explain any external funds that are claimed in the proposal. These funds must be itemized and their expenditure accounted for in the same manner as Support Fund money and institutional match. Refer to Section III.G of this RFP for details on matching requirements.

<sup>\*\*\*\*</sup>Matching funds for the endowment of chairs may be requested through P-KSFI, though such requests must adhere to all regulations governing the BoRSF Endowed Chairs for Eminent Scholars Program.

#### P-KSFI BUDGET

PROJECT YEAR (CIRCLE ONE):

(1)

5 COMPOSITE Title of Proposed Research: Mentoring at McNeese State University (McMentor) Principal Investigator(s): Dr. Luther Harold Stevenson III Institution(s) of Higher Education: McNeese State University PROPOSED BUDGET P-KSFI: Support Fund Money Institutional Private Sector/ Requested\* Match\*\* Other Match\*\*\* Α. Personnel 1. Research 2. Clerical 3. Subtotal 4. Fringe Benefits (20% of A.3) 5. Graduate Asst. 6. Student(s) 7. Endowment(s) \*\*\*\* 8. Subtotal A \$00,000 Supportive Expenses: 1. Travel \$ 3,000 2. Supplies 2,000 3. Consultants 1,000 4. Rentals 5. Printing 500 6. Equipment Other Expenses (Identify) a. Tuition Fees b. 8. Subcontracts 9. Subtotal B 6,500 \$00,000 Overhead: NOT PERMITTED \$00,000

\$00,000

6,500

TOTAL PROJECT COST:

<sup>\*</sup>In the budget justification, distinguish between funds requested from the P-KSFI principal program and the Enhancement for Severely Impacted Institutions (ESIP). Note that ESIP funds may be used only at the institutions listed in Appendix A of this RFP.

<sup>\*\*</sup>Stipulate whether in-cash or in-kind.

<sup>\*\*\*</sup>The budget page(s) must reflect and the budget justification page(s) must explain any external funds that are claimed in the proposal. These funds must be itemized and their expenditure accounted for in the same manner as Support Fund money and institutional match. Refer to Section III.G of this RFP for details on matching requirements.

<sup>\*\*\*\*</sup>Matching funds for the endowment of chairs may be requested through P-KSFI, though such requests must adhere to all regulations governing the BoRSF Endowed Chairs for Eminent Scholars Program.

#### P-KSFI BUDGET PROJECT YEAR (CIRCLE ONE):

COMPOSITE (2) 5 3 Title of Proposed Research: Mentoring at McNeese State University (McMentor) Dr. Luther Harold Stevenson III Principal Investigator(s): Institution(s) of Higher Education: McNeese State University PROPOSED BUDGET: Support Fund Money Institutional Private Sector/ Other Match\*\*\* Match\*\* Requested\* Α. Personnel 1. Research \$ 10,000 \$25,000 In-Cash 2. Clerical 25,000 In-Cash 10,000 3. Subtotal 4. Fringe Benefits 11,250 In-Cash (% of A.3) 4,500 5. Graduate Asst. 6. Student(s) 19,600 7. Endowment(s) \*\*\*\* \$36,250 In-Cash 34,100 8. Subtotal A Supportive Expenses: В. 1. Travel 500 2. Supplies 3. Consultants 4. Rentals 5. Printing 6. Equipment 7. Other Expenses (Identify) 2,000 In-Kind a. Facilities b. 8. Subcontracts 500 \$ 2,000 In-Kind 9. Subtotal B Overhead: \$23,205 In-Kind NOT PERMITTED 1. \$ 34,600 \$61,455

TOTAL PROJECT COST:

<sup>\*</sup>In the budget justification, distinguish between funds requested from the P-KSFI principal program and the Enhancement for Severely Impacted Institutions (ESIP). Note that ESIP funds may be used only at the institutions listed in Appendix A of this RFP.

<sup>\*\*</sup>Stipulate whether in-cash or in-kind.

<sup>\*\*\*</sup>The budget page(s) must reflect and the budget justification page(s) must explain any external funds that are claimed in the proposal. These funds must be itemized and their expenditure accounted for in the same manner as Support Fund money and institutional match. Refer to Section III.G of this RFP for details on matching requirements.

<sup>\*\*\*\*</sup>Matching funds for the endowment of chairs may be requested through P-KSFI, though such requests must adhere to all regulations governing the BoRSF Endowed Chairs for Eminent Scholars Program.

## P-KSFI BUDGET PROJECT YEAR (CIRCLE ONE):

1 2 **(3)** 4 5 COMPOSITE

istitu	tion(s) of Higher Ed	ducation: McNeese S	state University	
PRO	POSED BUDGET:			
		Support Fund Money Requested*	Institutional Match**	Private Sector/ Other Match***
Α.	Personnel			
	1. Research 2. Clerical	\$_10,000	\$25,000 In-Cash	\$
	<ol> <li>Subtotal</li> <li>Fringe Benefits</li> </ol>	10,000	25,000 In-Cash	
	(% of A.3) 5. Graduate Asst.	4,500	11,250 In-Cash	
	<ol> <li>Student(s)</li> <li>Endowment(s)***</li> </ol>			
В.	8. Subtotal A Supportive Expense	\$ <u>34,100</u> s:	\$ <u>36,250 In-Cash</u>	\$
	1. Travel	\$	\$	\$
	<ol> <li>Supplies</li> <li>Consultants</li> </ol>	500		
	4. Rentals			
	5. Printing			
	<ol> <li>Equipment</li> <li>Other Expenses</li> </ol>	(Identify)		
	a. Facilities b.		2,000 In-Kind	
	8. Subcontracts			
	9. Subtotal B	\$ 500	\$ 2,000 In-Kind	\$
c.	Overhead:			
	1.	NOT PERMITTED	\$23,205 In-Kind	\$
				<del></del>

<sup>\*</sup>In the budget justification, distinguish between funds requested from the P-KSFI principal program and the Enhancement for Severely Impacted Institutions (ESIP). Note that ESIP funds may be used only at the institutions listed in Appendix A of this RFP.

<sup>\*\*</sup>Stipulate whether in-cash or in-kind.

<sup>\*\*\*</sup>The budget page(s) must reflect and the budget justification page(s) must explain any external funds that are claimed in the proposal. These funds must be itemized and their expenditure accounted for in the same manner as Support Fund money and institutional match. Refer to Section III.G of this RFP for details on matching requirements.

<sup>\*\*\*\*</sup>Matching funds for the endowment of chairs may be requested through P-KSFI, though such requests must adhere to all regulations governing the BoRSF Endowed Chairs for Eminent Scholars Program.

## P-KSFI BUDGET PROJECT YEAR (CIRCLE ONE):

1 2 3 **(4)** 5 COMPOSITE

rincip	oal Investigator(s):]	Dr. Luther Harold	Stevenson III	
nstitu	ution(s) of Higher Educat	ion: McNeese S	State University	
. <u>PRC</u>	POSED BUDGET:	ort Fund Money	Institutional	Private Sector/
		quested*	Match**	Other Match***
Α.	Personnel	440000		
	1. Research	\$ 10,000	\$25,000 In-Cash	\$
	2. Clerical			<del></del>
	3. Subtotal	10,000	25,000 In-Cash	
	<ol> <li>Fringe Benefits         (% of A.3)</li> </ol>	4,500	11,250 In-Cash	
	5. Graduate Asst.	4,300	11,230 III-casii	
	6. Student(s)	19,600	· · · · · · · · · · · · · · · · · · ·	
	7. Endowment(s)****			
	8. Subtotal A	\$ 34,100	\$36,250 In-Cash	\$
В.	Supportive Expenses:			
	1. Travel	5	\$	\$
	2. Supplies	500	·	
	3. Consultants			
	4. Rentals			
	5. Printing			
	6. Equipment	- + : E\		
	7. Other Expenses (Ider a. Facilities	itiry)	2,000 In-Ki <u>nd</u>	
	a. racificies b.	<del></del>	2,000 III KIIIQ	
	8. Subcontracts			
	9. Subtotal B	\$ 500	\$ 2,000 In-Kind	\$
c.	Overhead:			
	1.	NOT PERMITTED	\$23,205 In-Kind	\$
тОг	TAL PROJECT COST:	\$ 34,600	\$61,455	\$
10.	THE THOOLET COOL.	T	1	•

<sup>\*</sup>In the budget justification, distinguish between funds requested from the P-KSFI principal program and the Enhancement for Severely Impacted Institutions (ESIP). Note that ESIP funds may be used only at the institutions listed in Appendix A of this RFP.

<sup>\*\*</sup>Stipulate whether in-cash or in-kind.

<sup>\*\*\*</sup>The budget page(s) must reflect and the budget justification page(s) must explain any external funds that are claimed in the proposal. These funds must be itemized and their expenditure accounted for in the same manner as Support Fund money and institutional match. Refer to Section III.G of this RFP for details on matching requirements.

<sup>\*\*\*\*</sup>Matching funds for the endowment of chairs may be requested through P-KSFI, though such requests must adhere to all regulations governing the BoRSF Endowed Chairs for Eminent Scholars Program.

## **ESIP & P-KSFI** BUDGET PROJECT YEAR (CIRCLE ONE):

1 2 3 4 5 **COMPOSITE** 

		ducation: McNeese S		
PRO	OPOSED BUDGET:	Character Provide Manage		
		Support Fund Money Requested*	Institutional Match**	Private Sector/ Other Match***
A.	Personnel		1140011	ocher maten
	1. Research	\$ 65,000	\$ <u>77,400 In-Cash</u>	\$
	2. Clerical			<del></del>
	<ol> <li>Subtotal</li> <li>Fringe Benefits</li> </ol>	65,000	77,400 In-Cash	
	(20% of A.3)	29,250	34,230 In-Cash	
	5. Graduate Asst.	27,230	JT, ZJO IN-Cash	
	6. Student(s)	60,760		
	<pre>7. Endowment(s)***</pre>			
	8. Subtotal A	\$ <u>155,010</u>	\$111,630 In-Cash	\$
в.	Supportive Expense	·s:		
	1. Travel	\$3,000	\$	\$
	2. Supplies	3,500		
	3. Consultants	1,000		
	4. Rentals			
	<ol> <li>Printing</li> <li>Equipment</li> </ol>	500		
	7. Other Expenses	(Identify)		
	a. Facilities	(Idenetly)	8,000 In-Kind	
	b.			27
	8. Subcontracts			
	9. Subtotal B	\$ 8,000	\$ 8,000 In-Kind	\$
C.	Overhead:			
	1.	NOT PERMITTED	\$86,343 In-Kind	\$
тот	AL PROJECT COST:	\$ 163,010	\$205,973	\$
		¥ <u> 100,010</u>	72001010	~

<sup>\*</sup>In the budget justification, distinguish between funds requested from the P-KSFI principal program and the Enhancement for Severely Impacted Institutions (ESIP). Note that ESIP funds may be used only at the institutions listed in Appendix A of this RFP.

<sup>\*\*</sup>Stipulate whether in-cash or in-kind.

<sup>\*\*\*</sup>The budget page(s) must reflect and the budget justification page(s) must explain any external funds that are claimed in the proposal. These funds must be itemized and their expenditure accounted for in the same manner as Support Fund money and institutional match. Refer to Section III.G of this RFP for details on matching requirements.

<sup>\*\*\*\*</sup>Matching funds for the endowment of chairs may be requested through P-KSFI, though such requests must adhere to all regulations governing the BoRSF Endowed Chairs for Eminent Scholars Program.

### **BUDGET NARRATIVE**

## ESIP YEAR 1 SUPPORT FUNDS REQUESTED - \$52,710

#### A. PERSONNEL

1. Staff - \$35,000

Support for the Director of Mentoring. This will be a new 12-month position on campus. The individual will be responsible for the day-to-day operations of the program and securing funds available from local sources to purchase materials and equipment that facilitates operations of the office. The office carries the responsibilities of selecting and training peer mentors, arranging mentoring schedules, facilitating the scheduling of mentoring sessions, preparations of time-sheets, and the routine clerical responsibilities of such an office.

4. Fringe benefits - \$15,750

Benefits are calculated at 45%. The amount is based on the maximum benefit package that could be requested by the Director

6. Students - \$1,960

Support for hourly wage for students who will constitute the pilot group of peer mentors for Biology 101.

\$7/hour x 5 hours/week x 14 weeks x 4 students

## ESIP, YEAR 1 INSTITUTIONAL MATCH - \$21,608

#### **A. PERSONNEL - \$2,880**

1. Staff - \$2,400 (in cash)

Support for one faculty member at the Associate Professor level to teach the 3 credit hour course to prepare the first cohort of peer mentors.

4. Fringe benefits - \$480

Benefits are calculated at 20% for existing faculty.

#### **B. SUPPORTIVE EXPENSES - \$2,000**

4. Rentals - \$2,000 (in kind)

324 Square feet of office space in Drew Hall

#### C. OVERHEAD - \$16,728

## P-KSFI - YEAR 1 SUPPORT FUNDS REQUESTED - \$6,500

#### **B. SUPPORTIVE EXPENSES - \$6,500**

#### 1. Travel - \$3,000.

Funds are requested to support attendance at national conferences dedicated to mentoring in the context of higher education or the first-year experience.

#### 2. Supplies - \$2,000

Funds are requested to purchase general office supplies required to open a new office. For example, paper, toner/ink, pens, small office items like stapler, tape dispenser, Furniture will be drawn from university surplus.

#### 3. Consultants - \$1,000

A consultant with experience in training peer mentors will be utilized to assist with the preparation of student mentors for the discharge of their duties.

#### 5. Printing - \$500

Use of campus printing services to reproduce materials for the distribution on campus to advertise the mentoring program and such forms as needed to facilitate record keeping for the program.

GRAND TOTAL FOR YEAR 1 (ESIP and P-KSFI) = \$59,210

## P-KSFI, YEAR 2 SUPPORT FUNDS REQUESTED - \$34,600

### A. PERSONNEL - \$34,100

1. Staff - \$10,000

Support for the Director of Mentoring. The individual will be responsible for the day-to-day operations of the program and securing funds available from local sources

## 4. Fringe benefits - \$4,500

Benefits are calculated at 45%. The amount is based on the maximum benefit package.

#### 6. Students - \$19,600

Support for hourly wage for students who will constitute the pilot group of peer mentors for Biology 101, Biology 225, and Mathematics 113. \$7/hour x 5 hours/week x 28 weeks (two semesters) x 20 students

## **B. SUPPORTIVE EXPENSES**

2. <u>Supplies - \$500</u>

Funds are requested to purchase general office supplies. For example, paper, toner/ink, and pens

## P-KSFI, YEAR 2 INSTITUTIONAL MATCH - \$61,455

## A. PERSONNEL - \$36, 250

1. Staff - \$25,000

Support for the Director of Mentoring. The individual will be responsible for the day-to-day operations of the program and securing funds available from local sources

4. Fringe benefits - \$11,250

Benefits are calculated at 45%.

## B. SUPPORTIVE EXPENSES - \$2,000

4. Rentals - \$2,000 (in kind)

324 Square feet of office space in Drew Hall

## C. OVERHEAD - \$23,205

## P-KSFI, YEAR 3 SUPPORT FUNDS REQUESTED - \$34,600

#### A. PERSONNEL - \$34,100

#### 1. Staff - \$10,000

Support for the Director of Mentoring. The individual will be responsible for the day-to-day operations of the program and securing funds available from local sources

#### 4. Fringe benefits - \$4,500

Benefits are calculated at 45%. The amount is based on the maximum benefit package.

#### 6. Students - \$19,600

Support for hourly wage for students who will constitute the pilot group of peer mentors for Biology 101, Biology 225, and Mathematics 113.

\$7/hour x 5 hours/week x 28 weeks (two semesters) x 20 students

#### **B. SUPPORTIVE EXPENSES**

#### 2. Supplies - \$500

Funds are requested to purchase general office supplies. For example, paper, toner/ink, and pens

## P-KSFI, YEAR 3 INSTITUTIONAL MATCH - \$61,455

#### A. PERSONNEL - \$36, 250

#### 1. Staff - \$25,000

Support for the Director of Mentoring. The individual will be responsible for the day-to-day operations of the program and securing funds available from local sources

#### 4. Fringe benefits - \$11,250

Benefits are calculated at 45%.

#### **B. SUPPORTIVE EXPENSES - \$2,000**

#### 4. Rentals - \$2,000 (in kind)

324 Square feet of office space in Drew Hall

#### C. OVERHEAD - \$23,205

### P-KSFI, YEAR 4 SUPPORT FUNDS REQUESTED - \$34,600

#### A. PERSONNEL - \$34,100

#### 1. Staff - \$10,000

Support for the Director of Mentoring. The individual will be responsible for the day-to-day operations of the program and securing funds available from local sources

#### 4. Fringe benefits - \$4,500

Benefits are calculated at 45%. The amount is based on the maximum benefit package.

#### 6. Students - \$19,600

Support for hourly wage for students who will constitute the pilot group of peer mentors for Biology 101, Biology 225, and Mathematics 113.

\$7/hour x 5 hours/week x 28 weeks (two semesters) x 20 students

#### **B. SUPPORTIVE EXPENSES**

#### 2. Supplies - \$500

Funds are requested to purchase general office supplies. For example, paper, toner/ink, and pens

## P-KSFI, YEAR 4 INSTITUTIONAL MATCH - \$61,455

#### A. PERSONNEL - \$36, 250

#### 1. Staff - \$25,000

Support for the Director of Mentoring. The individual will be responsible for the day-to-day operations of the program and securing funds available from local sources

#### 4. Fringe benefits - \$11,250

Benefits are calculated at 45%.

#### **B. SUPPORTIVE EXPENSES - \$2,000**

### 4. Rentals - \$2,000 (in kind)

324 Square feet of office space in Drew Hall

#### C. OVERHEAD - \$23,205

### COMPOSITE BUDGET SUPPORT FUND

## **SUPPORT FUNDS REQUESTED - \$163,010**

#### A. PERSONNEL - \$155,010

#### 1. <u>Staff</u> - \$65,000

Support for the Director of Mentoring. The individual will be responsible for the day-to-day operations of the program and securing funds available from local sources

### 4. Fringe benefits - \$29,250

Benefits are calculated at 45%. The amount is based on the maximum benefit package.

#### 6. Students - \$60,760

Support for hourly wage for students who will constitute the pilot group of peer mentors for Biology 101, Biology 225, and Mathematics 113. \$7/hour x 5 hours/week x 28 weeks (two semesters) x 20 students

## B. SUPPORTIVE EXPENSES - \$8,000

#### 1. <u>Travel</u> - \$3,000.

Funds are requested to support attendance at national conferences dedicated to mentoring in the context of higher education or the first-year experience.

### 2. <u>Supplies - \$3,500</u>

Funds are requested to purchase general office supplies required to open a new office. For example, paper, toner/ink, pens, small office items like stapler, tape dispenser, Furniture will be drawn from university surplus.

### 3. Consultants - \$1,000

A consultant with experience in training peer mentors will be utilized to assist with the preparation of student mentors for the discharge of their duties.

### 5. Printing - \$500

Use of campus printing services to reproduce materials for the distribution on campus to advertise the mentoring program and such forms as needed to facilitate record keeping for the program.

# **COMPOSITE BUDGET INSTITUTIONAL MATCH - \$205,973**

## A. PERSONNEL - \$111,630

1. Staff - \$77,400

Support for the Director of Mentoring. The individual will be responsible for the day-to-day operations of the program and securing funds available from local sources

4. Fringe benefits - \$34,230
Benefits are calculated at 45%.

## **B. SUPPORTIVE EXPENSES - \$8,000**

Rentals - \$8,000 (in kind)
 324 Square feet of office space in Drew Hall

### C. OVERHEAD - \$86,343

BIOGRAPHICAL SKETCH					
Name: Dr. Luther Harold Stevenson I	II	Position Title: P	rincipal Investigator		
EDUCATION (Begin with baccalaureate or other initial professional education and include postdoctoral training.					
INSTITUTION AND LOCATION	DEGREE	YEAR CONFERRED	FIELD OF STUDY		
Southeastern Louisiana College Louisiana State University Louisiana State University	Bachelor of Science Masters of Science Ph. D	1962 1964 1967	Zoology Bacteriology Microbiology		

#### **EXPERIENCE**

#### McNeese State University

Director, Quality Enhancement Plan, 2006-Present

Professor of Environmental Sciences, 1981-Present

Director, Violet H. Howell Institute for the Study of Industry-Community

Relations, 1999- Present

Department Head, Dept. of Biological and Environmental Sciences, 1983-1989

Department Head, Dept. of Environmental Sciences and Microbiology, 1981-1983

#### University of South Carolina

Assistant Professor to Professor of Biology, 1967-1981

#### SPECIAL PROFESSIONAL SERVICES

Managing Editor, ESTUARIES, JOURNAL OF THE ESTUARINE RESEARCH FEDERATION 1981-1998

Elective office including President in South Central Branch of the American Society for Microbiology and the Gulf Estuarine Research Society

Awarded status as an Honorary Member of the Gulf Estuarine Research Society, 1999

Awarded Life Membership in the Estuarine Research Federation (only Life Membership ever awarded by the Federation), 1999

#### **GRANT AWARDS**

Co-Principal Investigator

National Science Foundation, 2005-2010. Community Based STEM Education Initiative (Com-STEM). \$1,129,000.

#### Principal Investigator

National Science Foundation, 2006-2010. Engagement in the Science, Technology, Engineering and Mathematics (E-STEM). \$496,000

#### SCHOLARLY AND PROFESSIONAL PUBLICATIONS

#### 1. BOOKS

Stevenson, L. H., 2002. This Is Your Ticket: Lessons In College

Success. Louis Stokes – Louisiana Alliance for Minority Participation, Southern University, Baton Rouge, Louisiana.

Wyman, B. and L. H. Stevenson. 2001. The Facts On File Dictionary of Environmental Science, New Edition. Facts On File, Inc. New York.

Stevenson, L. H. and B. Wyman. 1991. The Facts On File Dictionary of Environmental Science. Facts On File, Inc. New York.

Stevenson, L. H. and R. R. Colwell (eds.), 1973. Estuarine Microbiol Ecology. Vol. 1. Belle W. Baruch Library in Marine Science. University of South Carolina Press, Columbia.

#### 2. REFEREED PUBLICATIONS (36 papers)

Last paper

Stevenson, L. H. 2002, 2003. Small Decisions Impact Retention and Graduation.

Proceedings, 6<sup>th</sup> and 7<sup>th</sup> Annul SoE EPSCoR HRD and LS-LAMP Student Research Conference,
Louis Stokes Louisiana Alliance for Minority Participation (LS-LAMP). Baton Rouge, LA

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٠		BIOGRAPHICAL SKETCH					
	Provide the following infor principal investigator/progr	rs. Begin with the					
	Name: Dr. George F. Mead  Position Title: College of Science Dean						
	EDUCATION (Begin with baccalaureate or other initial professional education and include postdoctoral training.						
	INSTITUTION AND LOCATION	DEGREE	YEAR CONFERRED	FIELD OF STUDY			
	Providence College Providence, RI	A.B.	1968	Mathematics			
	Univ. of South Florida Tampa, Florida	M.A.	1977	Mathematics			
	Univ. of South Florida Fampa, Florida	Ph.D.	1980	Mathematics			

#### **EXPERIENCE**

8/08	- 6/72	Berkeley Preparatory School, Tampa, Florida. Mathematics and physics instru	. 1 1 1
7/70	A /	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	CIOT: hasehall coach

- 7/72 8/73 Diocese of St. Petersburg, St. Petersburg, Florida. Coordinator of Religious Education.
- 9/73 1/76 Sacred Heart Church, Tampa, Florida. Director of Religious Education.
- 9/73 6/81 University of South Florida, Tampa, Florida. Graduate Teaching Assistant; Visiting Lecturer.

  Shorecrest Preparatory School St. Petersburg, Florida, Made Control of Religious Education.
- 9/74 6/77 Shorecrest Preparatory School, St. Petersburg, Florida. Mathematics and physics adjunct instructor.
- 6/77 8/77 NSF Student Science Training Program, University of South Florida, Tampa, Florida.

  Assistant to Program Director; Instructor.
- 8/77 8/81 Berkeley Preparatory School, Tampa, Florida. Chairman, Department of Mathematics.
- 6/79 8/79 Middle School Gifted Program, Center for Mathematical
- 6/80 8/80 Services, University of South Florida, Tampa, Florida.
- 6/81 8/81 Mathematics consultant and instructor.
- 9/79 6/80 Hillsborough Community College, Tampa, Florida. Mathematics adjunct instructor.
- McNeese State University, Lake Charles, Louisiana. Assistant Professor of mathematics and computing science.
- 6/83- 12/95 Department Head, Mathematics, Computer Science, and Statistics
- 1/96 Appointed Dean of the College of Science
  11/97-8/99 Interim Chief Information Technology Officer
- 11/2004 Appointed Interim Dean of the Graduate School

#### UNIVERSITY SERVICE

Member Graduate Faculty	1983 - present
Member Graduate Council	1988 - 1989
Registration Committee	1985 - 1989 1987 - present
PIPS Committee	1987 - present 1985 - 1988
Grade Appeals Committee	1985 - 1988
Bookstore Committee(Chairperson)	· - ·
Telephone Registration Committee	1989 - present 1990 - 1991
Outcomes/Assesment Committee	1990 - 1991 1986 – 1988
ROTC Scholarship Committee	
Search Committee for the Director of High School Relations	1987 - 1988
Academic Advisor	1988
Faculty Advisor to Newman Club of	1983 - present
January Club OI	

PROJECT DIRECTOR FOR THE FOLLOWING FUNDED GRANTS				
Louisiana Alliance for Minority Participation (LAMP)	1005 (	) <i>6</i>	2000	
1 (4-2-2)	1995-9 1996-9	· · ·	2000	
	1997-9		2000	
	1998-9	- 4.2	2000	
	1999-2	· · · -	2000	
	2000-2			
	2000-2	+		
	2001-2		-	
	2002-2	+		
	2003-2	*		
	2005-2			
Inservice on Integrated Algebra and Geometry Grant from LaSIP.	1993	\$ 87	7000	
Upward Bound Regional Math/Science Center Grant from U.S. Department of				
			\$ 110481	
"Mathematics Certification and Training Program for School Teachers" MSEA	grant from	the Louisian	na Board of	Rege
	1994-95	\$ 45	000	rege
	1993-94			
	1992-93			
	1991-92			
	1990-91			
	1989-90			
	1988-89			
	1987-88			
"ABLE Program" an adult remedial mathematics and reading program from Jobl	Matah: 1	000 01	Ф. <b>7</b> 0000	
program nom jobi		990-91 989-90	\$ 70000 \$112000	
'DRIVE" a summer remedial mathematics and reading program for " at risk" hig		•		
at risk nig	n school st	udents from	JobMatch;	
	1994	\$1300		
	1993 1992	\$1230		
	1992	\$ 910		
	1991	\$ 930		
	1990	\$1397		
	1989	\$1300		
	1988	\$1500		
	1987	\$13000 \$10000		
School Teacher Inservice/Training Calcasieu Parish" project from Title II funds.				
Tailing Calcasieu raitsii project from Title II funds.		\$ 2100		
	1994-95	\$ 1450		
	1993-94	\$ 1450		
	1992-93	\$ 1050		
	1991-92	\$ 9500		
Noth Tarabas I	1985-86	\$ 13500	J	
Math Teacher Inservice" from Evangeline Parish School Board.	1986	\$ 720	)	
Computer Updating Seminars" for the Calcasieu Parish Sheriff's Department;	1985	\$ 1300		
37	1700	Ф 1300		

, BIOGRAPHICAL SKETCH							
Name Dr. Nikos Kiritsis	Position Title Dean, College of Engineering & Technology						
INSTITUTION AND LOCATION	DEGREE		YEAR CONFERRED	FIELD OF STUDY			
Wright State U., Dayton, OH	B. S.		1987	Physics			
Wright State U., Dayton, OH	B. S. E.		1987	Engineering Physics			
Ohio State U., Columbus, OH	M. S.		1989	Mechanical Engineering			
Univ.of Texas, Austin, TX	Ph.D.		1999	Mechanical Engineering			

#### UNIVERSITY EXPERIENCE

3/06 – 7/06	Director, Louisiana Environmental Research Center, McNeese State University.
8/05 - Present	Interim Director, Office of Research Services and Sponsored Programs, McNeese State University.
8/03 - Present	Associate Professor, Engineering Department, McNeese State University. Courses taught: Dynamics (ENGR 302), Strength of
	Materials (ENGR 305) Systems and Controls (ENGR 430) Systems and Control Laboratory (ENGR 475) Engineering

Materials (ENGR 305), Systems and Controls (ENGR 430), Systems and Control Laboratory (ENGR 475) Engineering Measurements (ENGR 318), Engineering Material Laboratory (MEEN 316), Mechatronics Laboratory (MEEN 412), Mechanical Vibrations (MEEN 414), Virtual Instrumentation (ENGR 418/518), Modeling and Analysis of Dynamic Systems (MEEN 560), Advanced Dynamics Modeling and Analysis (MEEN 627).

8/99 - 7/03Assistant Professor, Engineering Department, McNeese State University. 1/02 - Present Co-op Director, Engineering Department, McNeese State University.

Adjunct Instructor, Austin Community College, Rio Grande Campus, Austin, Texas, Department of Physics and Astronomy. 8/94 - 8/99 Courses taught: Intro. to Engineering (ENR 1212), Engineering Mechanics I (ENR 2414), Mechanics of Materials (ENR 2434).

1/98-6/99 Assistant Instructor, Mechanical Engineering Department, UT-Austin. Courses taught: Numerical Analysis (ME 318), Machine Elements (ME 338).

#### **CONSULTING**

8/06 - Present

6/03 - 7/03	CITGO Petroleum Corporation, Taught an "Oil Analysis" course to engineers and tec	hnicians.
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Dean, College of Engineering and Technology, McNeese State University.

6/03 MSU Continuing Education, Taught a "Friendly Introduction to Microcontrollers" course local junior high school students under the College for Kids outreach program.

9/02 - 11/02 MSU Continuing Education Taught a "Machinery Vibration Analysis I" course to engineers and technicians from Lake Area industries.

8/01 - 11/01 Various Dates

Global Industries, Ltd., Carlyss, LA., Taught an "Offshore Structural Engineering" course to engineers working for Global. National Science Foundation, Division of Undergraduate Education, Served on a review panels to evaluate proposals submitted under the following programs: Course Curriculum and Laboratory Improvement (CCLI A&I and EMD tracks), Advanced Technological Education (ATE), Science, Technology, Engineering, and Mathematics Talent Expansion Program (STEP), Graduate Fellows in K-12 Education (GK-12), Graduate Research Fellowship, Academies for Young Scientists (AYS).

Global Industries, Ltd., Carlyss, LA., Experimental investigation of stress-strain characteristics of an underwater pipeline during 11/00 - 9/01 the spooling process on a lay barge.

#### **FUNDED GRANTS**

- NSF E-STEM Scholarships (#0630848), Engagement in the Science, Technology, Engineering and Mathematics Disciplines, September 2006, \$496,800, PI: Dr. Harold Stevenson
- NSF Science, Technology, Engineering, and Mathematics Talent Expansion Program (STEP #0525334), Community Based STEM Education Initiative, September 2005, \$1,129,996.
- State of Louisiana, LA GEAR UP Science Explorer Camp, May 2005, \$110,000 to develop and organize three one week long Forensic Science camps for 8<sup>th</sup> and 9<sup>th</sup> graders.
- McNeese State University Technology Assessment Student Committee (TASC), Improvement of the ENGR 312 Fluid Mechanics Laboratory, November 2004, \$42,190, PI: Dr. Bruce Savage.
- McNeese State University Technology Assessment Student Committee (TASC), Improvement of the MEEN 316 Strength of Materials Laboratory, November 2004, \$3,650.
- McNeese State University Gaming Revenue Fund, Improve Instruction in MEEN 316, ENGR 318, ENGR 418/518, ENGR 475 and MEEN 412, November 2004, \$6,135.90.
- NSF Advanced Technological Education (Articulation Partnerships #0402167) The Gulf Coast Technology Articulation Partnership (GS-TAP), August 2004, \$299,998, PI: Dr. John Galiotos, Houston Community College.
- McNeese State University Technology Assessment Student Committee (TASC), Improve Instruction Through Technology, November 2003,
- State of Louisiana, Enhancement of the Fluid Mechanics Laboratory, April 2003, \$119,500 for one year matched with \$39,119 from McNeese State University.
- State of Louisiana, Travel Grant for Emerging Faculty (TGEF), March 2003, \$750 to visit a grant funding agency.
- H. C. Drew Endowment, National Center of Excellence in Safety Technology Education, May 2002, \$6,600, write a proposal to NSF.
- State of Louisiana, Graduate Fellowship in Engineering, May 2002, \$28,000, PI: Dr. Omar Barkat.
- McNeese State University, The "Reverse Engineering Approach Curriculum in Teaching (REACT)," April 2002, \$1,500, seed money to initiate the program.

- McNeese State University Gaming Revenue Fund, The Working Demonstrations Program, November 2001, \$12,572.
- \$tate of Louisiana, Enhancement of the Systems and Control Laboratory, May 2001, \$82,550 for one year matched with \$5,965 from McNeese State University and \$22,095 from National Instruments Inc. Co-PI: Dr. Therrill Valentine.
- State of Louisiana, Enhancement of the Engineering Measurements Laboratory, May 2000, \$70,229 for one year matched with \$23,649.80 from McNeese State University and \$7,680 from National Instruments Inc.
- McNeese State Univ., The "Smart House," April 2000, \$2,000, seed money during the initial phase of the "Smart House," development.
- Austin Community College Mini-Grant Program Mathcad Primer for Introductory Engineering Courses, April 1995, \$1,400.
- NSF Human Resources Development Summer Science Camp for Minority Students (SSC), a three-year grant awarded on July 1994, \$187,400 matched with \$37,421 from a local school district.
- NSF Instrumentation and Laboratory Development (ILI) Computing Laboratory Development, July 1994, \$100,000 matched with \$105,000
- Texas Space Grant Consortium Space Science Short Course for Science and Mathematics Teachers, May 1994, \$8,368.
- NSF Alliance for Minorities Participation (AMP) Student Project, June 1993, \$7,000.
- NSF Instrumentation and Laboratory Improvement (ILI) Fluid Mechanics Laboratory Development, July 1992, \$89,569 matched with \$89,569 from the university. Co-director: Dr. R. Fred Rolsten.
- SME Foundation Capital Equipment, May 1992, \$15,000 matched with \$47,000 from the university. Co-director: Dr. R. Fred Rolsten.
- SME Foundation Student Recruiting, May 1992, \$2,500 matched with \$2,500 from the university. Co-director: Dr. R. Fred Rolsten.

#### **HONORS & AWARDS**

- Professor of the Year, 2000-01,  $M\Omega\Sigma$  McNeese Engineering Honor Society.
- Nominated by colleagues for the 1993 Outstanding Faculty Award at the University of Texas Pan American.
- Graduated with Honors in Engineering Physics
- Outstanding Student Award 1986-1987, College of Engineering and Computer Science, Wright State University.
- Physics Book Fund Award for 1986, Wright State University.

## SHORT COURSES/SEMINARS ATTENDED

- "Department Head Leadership Institute," Workshop by Dr. David McFarland, Penson Associates Inc., McNeese State Univ., October 9-10,
- "Authoring Authentic Learning Tass," Workshop by the National Center for Manufacturing Education, Houston, TX, October 28-29, 2004.
- "Faculty Workshop for Program Improvement," ABET, Baltimore, MD, January 26-27, 2002.
- "Developing RSView 32 Projects," by Rockwell Automation, Cleveland, OH, October 29 November 2, 2001
- "Solutions in Motion," by Parker Deadal Inc., Austin, TX, January 27,1994.
- "LabWindows for DOS," by National Instruments Corp., Austin, TX, December 13-15, 1993.
- "Laser Measurements," by NIST, Boulder, CO, August 17-20 1993.
- "Hydraulic/Electric Relay Control Course," by AMATROL Inc., Jeffersonville, IN, July 19-23, 1993.
- "Experimental Stress Analysis Techniques," by the Measurement Group Inc., Raleigh, NC, July 12-16, 1993.
- "Photoelasticity," by the Measurement Group Inc., Houston, TX, March 23, 1993.
- "Theory of Constraints," by the Abraham Y. Goldratt Institute, Edinburg, TX, January 14-15, 1993.
- "Seminar on Rheology," by Brookfield Inc., Houston, TX, December 15, 1992.
- "Faculty Workshop on Ethics and Professionalis," TX State Board of Registration for Professional Engineers, Austin, TX, June 11-13, 1992.

#### **PUBLICATIONS**

- Kiritsis N., Huang Yi-Wei, Ayrapetyan David, "A Multi-Purpose Vibration Experiment Using Labview," Proceedings of the 2003 American Society for Engineering Education Annual Conference and Exposition, Nashville, TN, June 22-25, 2003.
- Galiotos J., Kiritsis N., "McNeese State University and Houston Community College Northeast: Challenges Facing Small Regional Engineering Coop Programs," Proceedings of the 2003 Confer. for Industry and Education Collaboration, Tucson, AZ, January 27-31, 2003.
- Kiritsis N., Longoria R., and Gonzales R., "Experimental Verification of the In Vitro Microdialysis System Model," submitted to the ASME Journal of Biomechanical Engineering, August 2002.
- Kiritsis N., Longoria R., and Gonzales R., "Modeling a Microdialysis System for In Vitro Applications," submitted to the ASME Journal of Biomechanical Engineering, January 2002.
- Kiritsis N., "ENGR 318 Engineering Measurements: A Laboratory Manual," Engineering Department, McNeese State Univ., January 2001.
- Kiritsis N., "Modeling of Microdialysis Processes and Systems Used for In Vitro Experiments," Ph.D. Dissertation, The University of Texas at
- Kiritsis N., "Summer Science Camp at the University of Texas Pan American," Proceedings of the 1996 Annual Meeting of the Gulf Southwest
  - Rolsten R.F., Kiritsis N., "Laboratory Manual for MECE 2421 Mechanics of Solid," The University of Texas Pan American, Sum. 1992. Guezenec Y.G., Kiritsis N., "Statistical Investigation of Errors in Particle Image Velocimetry," Experiments in Fluids, Vol. 10, No. 23, 1990.

#### BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and consultants and collaborators. Begin with the principal investigator/program director. Photocopy this page for each person.

Name: Dr. Mark Wygoda

Position Title: Professor and Department Head

EDUCATION (Begin with baccalaureate or other initial professional education and include postdoctoral training.

INSTITUTION AND LOCATION	OCATION DEGREE YEAR CONFERRED		FIELD OF STUDY
Emory University	B.S.	1973	Biology
University of South Florida	M.A.	1976	Biology
University of Florida	Ph.D.	1982	Zoology

RESEARCH AND PROFESSIONAL EXPERIENCE: Starting with present position, list, in reverse chronological order, previous relevant employment, experience, and honors. Key personnel includes the principal investigator and any other individuals who participate in the development or execution of the project. Key personnel typically will include all individuals with doctoral or other professional degrees, but in some projects will include individuals at the masters or baccalaureate level provided they contribute in a substantive way to the development or execution of the project. Include present membership on any Federal Government public advisory committee. List, in reverse chronological order, the titles, all authors, and complete references to pertinent publications during the past five years and to representative earlier publications pertinent to this application. DO NOT EXCEED TWO PAGES.

McNeese State University, Department of Biological and Environmental Sciences, Lake Charles, LA

1998 – present
1993 – present
Summer 1995
Summer 1997
1989 – 1993
1985 – 1989

Department Head
Professor of Zoology
Interim Department Head
Assistant Department Head
Associate Professor of Zoology
Assistant Professor of Zoology

Seton Hill College, Department of Biology, Greensburg, PA 1982 – 1985 Assistant Professor of Biology

BIOGRAPHICAL SKETCH				
Name: Sid Bradley		Position Title: Department Head, Department of Mathematics, Computer Science, and Statistics		
INSTITUTION AND LOCATION	DEGREE	YEAR CONFERRED	FIELD OF STUDY	
Parsons College Fairfield, IA	B.S.	1971	Mathematics	
Truman University Kirksville, MO	M.A.	1976	Mathematics	

### PROFESSIONAL EXPERIENCE:

1971 – 1973 1973 – 1979 1980 – 1981	8 <sup>th</sup> Grade Math Teacher, Washington Jr. High School, Ottumwa, Iowa High School Math Teacher, Tate High School, Pensacola, Florida Math Instructor, Truman University, Kirksville MO		
1982 – 1996	Assistant Professor of Mathematics and Computer Science, McNeese State University, Lake Charles, LA		
1996 – Present	Department Head of Mathematics and Computer Science, McNeese State University, Lake Charles, LA		

### **RESEARCH EXPERIENCE:**

- Investigations Incorporating Mathematical Power for Middle and High School Teachers of Mathematics (LaSip 2005, 2006 \$150,000)
- Investigations Incorporating Number, Number Relations, and Measurement in Elementary and Middle School Mathematics," (LaSip 2003-2004 \$140,000)
- Investigations Incorporating algebra and Geometry in Elementary and Middle School Mathematics," (LaSip 2002-2003 \$140,000);
- "Summer Inservice on Integrated Algebra and Geometry for Ninth Grade Teachers," (LaSip 1993-1994 \$90,000)
- "A Certification and Mathematics Training Program for Secondary and Middle School Teachers" (Tytle II \$40,000 each year 87-88, 88-89, 89-90, 90-91, 91-92, 92-93, 93-94)
- "Mathematics Laboratory Computer-Version" (Instructional Grant Northeast Missouri State University 1981 \$1,500)

### SCHOLARLY ACTIVITY

- "Making Train Connections with Math Connections," LATM State Conference, Fall 1993
- "Graphics Calculator for High School Mathematics Teachers," Calcasieu Parish, Spring, 1991
- "FX-7000 Graphics Calculator," MAA Regional Meeting, Fall 1991
- "Teacher Retraining", Calcasieu Parish, 1989, "Data Structures Trees," Lafayette Parish, 1989;
- "The Apple Computer and Student Involvement in CAI," NCTM Regional Meeting, 1986
- "Implementing Computer Literacy Through Assorted Techniques," LAQUE Conference, 1986
- "CAI Architecture in Junior High Mathematics," NCTM Regional Meeting, 1984;
- "Hands-On Approach to Application Software," Author/Editor, 1984
- "Introductory Algebra," Participating Author, 1982
- "Remedial Mathematics Modules," Escambia County, FL, 1979

# **APPENDIX**

Letter of Support



Provost & Vice President Academic Affairs Box 93220 Lake Charles, LA 70609 337/475-5508 Fax 475-5511

E-mail: jdaboval@mcneese.edu

March 15, 2007

Dr. Kerry Davidson
Deputy Commissioner for Sponsored Programs
Board of Regents
P.O. Box 3677
Baton Rouge, LA 70821-3677

Dear Dr. Davidson,

I am very pleased to endorse the "Mentoring at McNeese State University (McMentor)" project by Dr. Harold Stevenson. This project will strengthen existing mentoring programs as well as create new mentoring programs in areas where none currently exist. Upon funding of the P-KSFI grant, sustainable peer and faculty mentoring will be implemented.

In the event this proposal is funded, McNeese State University is committed to providing support for faculty developing the operating structure to build mentoring programs serving biology, chemistry, and mathematics courses that traditionally create barriers to student success. Faculty mentors with strong interests in student learning and service will be recruited.

Since institutional support is important, McNeese State University will commit to matching funds by hiring a Director of Mentoring at the MS level for \$35,000 plus related fringe for 2007-2008. In 2008-2009, 2009-2010, and 2010-2011 the grant will pick up \$10,000 each year and the university will assist with \$33,750 for those three years and the full amount thereafter.

McNeese State University has had a successful history of administering major grants in the past, including several grants in the \$8M to \$12M range. While we remain primarily a teaching institution, McNeese is proud of its research and is known for integrating research and education.

Obviously, my personal support and commitment is strong. Please give this proposal your strongest consideration.

Sincerely,

Jemne Daboval

Provost and Vice President for Academic Affairs

JD/pc

Copy: President Robert Hebert

Ms. Janet Woolman, Director, Research Services and Sponsored Programs

### **Contract Work Plan**

### APPENDIX B SCOPE OF SERVICES

#### a. GOALS AND OBJECTIVES

Project Goal: To establish an institutional student-student peer mentoring program.

Objective #1. Creation of an office of student mentoring staffed by a director and a cadre of trained, effective peer mentors.

Objective #2. Use three courses identified as "killer courses" as the vehicles for testing the development model. The courses identified as "killer courses" by Noel-Levitz, a firm that provides enrollment management consulting for higher education, are Biology 101 (Introduction to Biology I), Biology 225 (Human Anatomy and Physiology I), and Mathematics 113 (College Algebra).

Intermediate Goal One: Establish a new office of student support named, Director of Student Mentoring.

Objective. Identify and retain a properly trained individual to assume the position of Director of Student Mentoring.

Intermediate Goal Two: Develop a self-sustaining core group of well-trained and effective peer mentors.

Objective. Develop an environment that is supportive of mentors and mentees such that the position is seen as desirable as student employment so that the supply of potential mentors is greater than the demand resulting in a selective hiring based on quality and potential for student development as a mentor.

#### b. DELIVERABLES

June 30, 2008: First-Year Annual Project Report

June 30, 2008: First-Year Annual Financial Status Report

June 30, 2009: Second-Year Annual Project Report

June 30, 2009: Second-Year Annual Financial Status Report

June 30, 2010: Third-Year Annual Project Report

June 30, 2010: Third-Year Annual Financial Status Report

June 30, 2011: Final Project Report

Sept.30, 2011: Final Expenditures Report and the return of any unexpended funds

#### c. PERFORMANCE MEASURES

The performance measures by which the success of McMentor will be judged will of necessity fall under three categories. One, the process objectives that monitor the establishment and execution of the initiative will reveal what steps have been taken by the program toward implementation. Second, the statistical objectives that monitor percentage of students in specific classes that earn a grade of C or better will inform discussions about the efficacy of the program in terms of improvement in the percentage of individuals that succeed in specific courses as opposed to the circumstance described earlier. Third, the assessment of what students actually learn in the basic science and mathematics courses represented by biology and college algebra, especially as learning is related to the core competencies required by the Board of Regents of graduates of higher education in the state of Louisiana.

#### Process timeline

Progress along all three lines of assessment will not be even or simultaneous. The important milestones in the implementation of the program and process objectives will include the items listed below in the Detailed Work Plan.

#### Statistical timeline

The second level of performance measures and milestones will involve an improvement of the outcomes in terms of the W+F rates in the three target courses in the core curriculum. Realistically, dramatic improvement in the performance level of students is not expected immediately. Since an organized mentoring effort is not in the student culture at present, there will be a lag phase as students adjust to the development of a culture of peer mentoring. The first attempt at full scale mentoring will occur in the Fall term of 2008. Modest returns from that effort are expected.

The expected improvement in the W+F rates are summarized below based on performance in the fall terms of each academic year. Grade performance during the Fall term is the best indicator of the efficacy of the program since the courses in question are heavily populated by first-year students.

Biology 101 W+F rates Historical = 62%, projected: F07, 60%	F08, 55%	F09, 40%	F10, 25%
Biology 225 W+F rates Historical = 60% Projected F07, 58%	F08, 55%	F09, 45%	F10, 38%
Mathematics 113 W+F rates Historical = 52% Projected F07, 50%	F08, 48%	F09, 45%	F10, 35%

#### Learning assessment

The third category of assessment will be conducted in association with the office of Institutional Effectiveness as part of the overall assessment of the core competencies associated with courses taken in fulfillment of the general education or core requirements. The selection of core competencies addressed by each course, the methods of assessment to be used, and the benchmarks associated with each core competency are being planed at this

time in association with the reaffirmation of accreditation by the Southern Association of Colleges and Schools. Consequently, projected improvements related to the operation of McMentor are not possible at this time. However, mentor training will certainly include a segment on the core competencies related to each of the courses that are being targeted for improvement (See "d" below).

#### d. MONITORING PLAN

The Louisiana Board of Regents will be able to monitor the progress made using the grant support in three ways. One, the program management, including the Principal Investigator and the Director of Mentoring, can provide documentation or host site visits that may be requested. Second, the time-line provided in part "c" above provides a detailed set of benchmarks that can be used to assess the progress of the initiative. Third, the documentation being prepared at the time of this writing for submission of the Southern Association of Colleges and Schools in partial fulfillment of the requirements for reaffirmation of accreditation includes a requirement that all general education or core courses address and assess at least one of the eleven core competencies mandated by the Board of Regents. The initial biology courses targeted for instituting McMentor, Biology 101-102 and Biology 225-226, will assess "Students will understand the scientific method." and the initial mathematics courses in McMentor, Mathematics 113 and 170 will assess "Students will understand numerical data and statistics." Changes in those assessment outcomes can be made available to the Board of Regents.

#### e. UTILITY OF FINAL PRODUCT

Tutoring on the McNeese campus is scattered and disjointed. The Division of General and Basic Studies tutors on a modest scale. The student athletes have an opportunity for tutoring through the athletic office. The Department of English and Foreign Languages offers writing assistance to students enrolled in English 101 and 102. Com-STEM offers tutoring to STEM majors who participate in that program. A writing center will be opened in association with the Quality Enhancement Plan to serve the writing needs of a campus-wide clientele. Now, McMentor seeks to assist students enrolled in specific "killer courses."

Under the leadership of the principals who originated this proposal, and with the stimulus provided by this proposal, an effort will be initiated to organize a consolidation of the tutoring and mentoring efforts under a university umbrella. Since the Director of Mentoring will be a continuing position, that individual could be designated as the Director of Mentoring and Tutoring and tasked with the responsibility of coordinating and/or consolidating services on campus. Likewise, the continuing director will be responsible for securing support from university, MSU foundation, financial aid, and grant sources to provide support for tutors and mentors. This proposal will leave a footprint on campus. This is an opportune time to consolidate, or at least coordinate services. The willingness of the university to assume the salary of someone to be a responsible advocate is an excellent sign of university support.

When the model proposed in this submission is refined, established and proven, the model has portability to other schools in the University of Louisiana System. McMentor puts the student at the center of efforts to promote student learning. The old system of "sink or swim"

is no longer tolerable in higher education in Louisiana. Consider the bell-shaped curve that is generated when the innate academic skill levels of individual students are plotted. On the one extreme, one finds those student that do not have the innate ability to succeed regardless of what the school does. At the other extreme, one finds students who are going to succeed regardless of what steps the university takes. This proposal targets the big middle, where too many students who have the ability to be academically successful but somehow fall through the cracks. When we are successful, the Board of Regents will have a tool to recommend to other schools in the state.

### **DETAILED WORK PLAN**

#### Calendar Year 2007

Summer term 2007-2008 Academic Year

June Establish the formal management team consisting of the PI and Co-PIs and

coordinate mentoring program with the department heads of the Department of Biological and Environmental Sciences and the Department of Mathematics,

Computer Science, and Statistics

July Complete job description for the Director of Mentoring

Establish search committee to seek and select the candidate to fill the Director's

position

Fall term 2007-2008 Academic Year

October Retain the Director of Mentoring

Establish the office of the Director of Mentoring

November Establish relationship with the Chair, Department of Biological and

Environmental Sciences and the faculty group responsible for instruction in

Biology 101 (first target for mentoring effort)

November Complete formulation of credentials required of candidates for peer mentors for

Biology 101

Give serious consideration to successful students in the Biology Education

program for use as peer mentors

November Select and train five candidates to fill peer mentor positions for Biology 101

**Note** Selecting and training peer mentors will be an ongoing process as peer mentors

rotate through the program

#### Calendar Year 2008

Spring term 2007-2008 Academic Year

January Continue training of Biology 101 mentors

Establish pilot mentoring program in two sections of Biology 101 utilizing facilities available in the Tutoring Center operated by the Division of General and

**Basic Studies** 

February Establish formal relationship with the faculty responsible for instruction in

Biology 225

Develop criteria for selecting candidates for mentor positions for Biology 225 Give serious consideration to successful students enrolled in the Biology

Education program

Recruit and select five candidates for mentors for Biology 225

March Initiate mentoring activities in one section of Biology 225 as a pilot effort

March Mid-term assessment of peer mentoring in Biology 101 involving instructors, peer

mentors, Director of Mentoring, and the appropriate department head.

Alter the McMentor program and procedures indicated by the outcome of the

assessment of the experience in Biology 101

May Conduct end-of-term assessment of the efficacy of McMentor in Biology 101

Adjust and modify McMentor as indicated by the outcomes assessment.

Summer Term, Academic Year 2008-2009

June Formal classroom training for all mentors

June Complete First-Year Annual Project Report and Annual Financial Status Report

Fall Term, Academic Year 2008-2009

August Implement peer mentoring in all sections of Biology 101

Implement peer mentoring in all sections of Biology 225

August Establish formal relationship with the faculty responsible for instruction in

Mathematics 113 and the Director of Freshman Mathematics

Develop criteria for selecting candidates for mentor positions for Mathematics

113

Give serious consideration to successful students enrolled in the Mathematics

Education program

Recruit and select 12 candidates for mentors for Mathematics 113

October Initiate peer-mentoring activities in two sections of Mathematics 113 as a pilot

activity

November Major review and assessment of the first full-scale mentoring efforts in Biology

101 and Biology 225

Modification of plans, training and procedures based on assessment

Planning for full scale mentoring effort in all sections of the target killer courses and integration of McMentor into the Quality Enhancement Plan operated by McNeese State University as part of the reaffirmation of accreditation by the

Southern Association of Colleges and Schools

Calendar Year 2009

Spring Term Academic Year 2008-2009

January Implement full scale McMentor in all three target courses, Biology 101, Biology

225, and Mathematics 113

January Integrate McMentor into the Quality Enhancement Plan operated by McNeese

State University as part of the reaffirmation of accreditation by the Southern

Association of Colleges and Schools

April Conduct full scale review of the assessment of McMentor project

Plan changes needed to improve the project-involving faculty instructing the target courses and students who have participated as mentees along with the

Director of Mentoring and the principals involved in the project

Summer Term Academic Year 2009-2010

June Complete Second-Year Annual Project Report and Annual Financial Status

Report

July Train new Mentor recruits as needed

Fall Term Academic Year 2009-2010

August Continue full scale McMentor in all three target courses, Biology 101, Biology

225, and Mathematics 113

October Plan for the expansion of peer mentoring activities to include Biology 102,

Biology 226, and Mathematics 170

Calendar Year 2010

Spring Term Academic Year 2009-2010

January Continue full scale McMentor in all three target courses, Biology 101, Biology

225, and Mathematics 113

January Implement peer mentoring in one section each of Biology 102, Biology 226, and

Mathematics 170

March Plan for the expansion of McMentor to other courses in the College of Sciences

and the College of Engineering and Engineering Technology

Selection of courses in the two Colleges that will be added to the McMentor

program

Summer Term Academic Year 2010-2011

June Complete Third-Year Annual Project Report and Annual Financial Status Report

July Train new Mentor recruits as needed

Fall Term Academic Year 2010-2011

August Continue full scale McMentor in all three target courses, Biology 101, Biology

225, and Mathematics 113

Implement peer-mentoring activities in all sections of Biology 102, Biology 226,

and Mathematics 170

August Implement McMentor in the pilot courses targeted for expansion of the peer-

mentoring program to include additional courses in the College of Sciences and

the College of Engineering and Engineering Technology

November Plan for the implementation of McMentor in two additional Colleges of the

university

Calendar Year 2011

Spring Term Academic Year 2010-2011

January Continue full scale McMentor in all three target courses, Biology 101-102,

Biology 225-226, and Mathematics 113-170

Implement peer mentoring in additional courses in the College of Sciences and

the College of Engineering and Engineering Technology.

March/April Selection of courses in the two additional Colleges that will be added to the McMentor program

April Campus conference led by an outside facilitator to assess the efficacy of McMentor and the fulfilling intent of the program build a sustainable peer mentoring culture on campus.

**Note** Included as participants in the conference will be the

- Vice President Academic Affairs
- Dean College of Science
- Dean College of Engineering and Engineering Technology
- Deans of the two colleges from which mentored courses are selected later in the program
- Department Head Biological and Environmental Sciences
- Department Head Mathematics, Computer Science, and Statistics
- Department Heads of the departments from which mentored courses are selected later in the program
- Director of Mentoring
- Principal Investigator
- All Co-Principal Investigators
- Faculty who taught classes for which peer mentoring was available Office of Career Services
- Alumni Office
- Peer Mentors who have experience with McMentor
- Students who have received mentoring services provided by the program

#### Summer Term Academic Year 2011-2012

June

Complete Final Project Report. The campus conference outlined above will inform the final report.

July Train new Mentor recruits as needed

#### Fall Term Academic Year 2011-2012

August

Implement peer mentoring in courses from two Colleges in the university outside of the science and engineering areas

September Final Expenditures Report

### Annual Report for Year 3 (ending 6/30/2010)

#### McMentor, summer report 2010

Title: Mentoring at McNeese State University (McMentor)
Post-Katrina Support Fund Initiative, Primarily Education Subprogram

#### 1. Personnel

**Principal Investigator**: L. Harold Stevenson, Professor and Administrator Quality Enhancement Plan

Professor Stevenson is responsible for the day-to-day management of the program including the selection of peer mentors and coordinating the program with faculty teaching the target courses. He reports directly to the Provost/Vice President of Academic Affairs, and he has a one-half time faculty appointment in the Harold and Pearl Dripps Department of Agricultural Sciences. The Director of Research Services ensures that the proposed functions of McMentor are carried out and Research Accounting office ensures that all funds are spent in accordance with program objectives and in compliance with financial regulations of the State of Louisiana.

**Co-Principal Investigator**: <u>Nikos Kiritsis</u>, Associate Professor and Dean College of Engineering and Engineering Technology

Dean Kiritsis acts as an internal consultant for the program and ensures that the program meets university expectations

**Co-Principal Investigator:** George Mead, Professor and Dean College of Science Dean Mead acts as an internal consultant for the program and ensures that the program meets the expectations of the College of Science and the university.

**Co-Principal Investigator:** Mark Wygoda, Professor and Department Head, Biological and Health Sciences. Dr. Wygoda acts as an internal consultant and facilitates the selection of courses and faculty that participate in the peer mentoring in Biology courses.

**Co-Principal Investigator:** <u>Sid Bradley,</u> Assistant Professor of Mathematics and Computing Sciences, acts as an internal consultant and facilitates the involvement of McMentor with mathematics courses

**Assistant Professor**: Duston Hoffman organizes faculty involved in Biology 101, Introduction to Biology I He also monitors mentor activity and allows the use of the laboratory dedicated to the departmental course in Mammalogy for mentoring activities conduced by the program. Dr. Hoffman leads the efforts of the Biology faculty to conduct research on the efficacy of mentoring services.

Administrative Assistant: Georgette Shades provides clerical services to the project. Her contributions include receiving and processing applications from potential mentors, providing information to the decision-makers on the academic records of potential mentors, preparing paperwork needed by the Office of Student Employment, maintaining records of mentor work performance, maintaining a daily record of student participation in the program, managing time sheets and payroll distribution.

#### 2. Activities and Findings

# Describe the major research and educational activities undertaken in this reporting period.

Seventeen peer mentors served the program by assisting students in all sections of Biology 101 and 225 this reporting period. The great majority of the activity in the Spring term was related to BIOL 101. The peer mentors participated in training sessions with the faculty members in charge of the various sections and they met with students in those classes for mentoring sessions on a walk-in basis.

# Describe and provide data supporting the major findings resulting from these activities

For the classes in BIOL 101 during the Fall 2009 and the Spring 2010 term, an increase was noted in the fraction of students in BIOL 101 Introduction to Biology; however, there was a substantial decrease among students enrolled in BIOL 225 and 226 (Anatomy and Physiology). These results are a direct result of faculty participation or the lack thereof. The faculty leader was Dr. Hoffman who strongly encouraged students in the introductory biology course to participate by providing bonus points on tests.

The number of student visits to the facility set aside for interactions among students and peer mentors was 462 during the Fall term of 2009. The number of visits per week varied from 13 the last two class days of the term and 63 during a test week. Faculty turnover among those instructing in BIOL 225 and 226 (Anatomy and Physiology) precipitated a reduction in the number of student visits to peer mentors during the Spring term. However, that reduction in A&P students allowed us to isolate issues associated with the efficacy of our approach to providing assistance to students

The loss of participation by those faculty members involved in BIOL 225 and 226 led to a reduction in the number of total tutorials in the Spring term of 2010 as compared to Spring 2009. There were 639 student visits to the facility in the Spring of 2009 compared to 564 student visits in Spring 2010. Of the 564 student visits during the Spring term of 2010, 523 (93%) were from BIOL 101 classes. The number of students coming into the center per week ranged from 20 (first week) to 77. However, we still see clusters of visits centered on the weeks that tests are given, 60-70 visits during test weeks and 18 - 20 during nontest weeks.

As indicated in previous reports, this type of behavior on the part of students cannot be expected to result in improved learning. True to expectations, the performance on Biology 101 exams has not changed over the past three semesters despite of an increase in the number of visits to the facilities where peer mentors and biology students can work on issues related to the course. The data from Dr. Hoffman's class for three semesters are shown below. The spring 2009 term can be considered a benchmark (control) term and the next two terms can be considered to be experimental in that a major effort was made to get students in the class to visit the McMentor facilities. Despite over 500 student visits to the facilities, no improvement in student performance in terms of test scores are evident when class averages are examined. See table below.

Table: The average student performance on four examinations administered during each to three semesters and the mean of those scores. The instructor, required textbook, course content, and the examinations were unchanged from term to term. Peer mentoring was not strongly encouraged during the Spring term of 2009. Students were awarded bonus points if they participated in the mentoring program in the latter two terms.

. Seme	ster	Exam 1	Exam 2	Exam 3	Exam 4 Sem.	Mean .
Spring	g 2009	70.6	70.3	65.8	71.5	69.5
Fall 2	009	68.6	71.2	69.3	67.5	69.1
Spring	g 2010	67.5	67.3	68.1	70.6	68.4

#### Describe the opportunities for student training and workforce development

The assessment of the outcomes of the work undertaken in the McMentor program in academic year 2009-2010 along with opportunities for student training are considered below under the part of the report calling for a description of the problems encountered during the last year. Peer training will change substantially in the upcoming Fall 2010 term as indicated below.

# Describe community development and/or outreach activities your project has undertaken

The community outreach during this year have been limited.

#### Describe any problems encountered during the last year of project activities

The system used to deliver peer tutoring and mentoring services for introductory courses in the biology area have evolved in response to the assessment of outcomes each year. We are yet to develop a system that delivers maximum benefits to the students. One certainty that has developed through this process of trial and assessment relates to student participation. Students cannot profit from tutoring if they do not show up at the tutoring site. Almost invariably, first-year students are fully confident of their ability to earn an A or B in any first-year biology class. After all, they have already mastered biology in high school; first-year students view college biology as just more of the same. "I do not need tutoring" is a common refrain.

When about 50 percent of these self-assured students earn a D or F on the first semester test, their confidence is not shaken. Students continue to feel that the fault must reside in the instructor's method of teaching or testing. Surely, the instructor will come to realize the error of their ways and the result will be better on test two. The concept of seeking assistance materializes in only a few students. The results are predictable; the same actions yield the same results on subsequent tests. Persuading the masses to attend mentoring sessions requires something more than a poor test performance.

We have employed several methods to encourage first-year student to avail themselves of mentoring services offered by McMentor. Students ignored classroom exhortations by the

teaching faculty; likewise, they were not responsive to peer testimonials. Requiring participation in participation as part of the course grade evoked a storm of protest from the students forcing the faculty to abandon that initiative.

Applying bonus points that potentially can improve the final grade assigned for the course for participation proved to be a usable vehicle to increase the number of student visits to the facility. Students earned bonus points if they came to the center, signed the attendance roster, and stayed for an appropriate length of time. However, this apparent increase in the use of our services did not result in enhanced student performance of tests. The grade distributions on tests after the institution of bonus availability were not different from the distributions observed before the availability of tutoring.

Assessment of the results revealed two factors that worked against the enhancement of grade performance on tests by visiting the program's mentoring center. One, students flocked to the center the day before the test or even the day of the test. Visiting the center before the test ensured the availability bonus points added to the test score. However, learning was at a minimum; cramming the day before the test by any other name does not allow for the growth and stabilization of synapses needed for learning to be evident the next day (Robert Leamnson. 1999. *Thinking About Teaching and Learning: Developing Habits of Learning with First Year College and University Students*. Stylus Publishing, Sterling, VA). As counter-productive as visiting the peer mentor the day before the test is to establishing the neuronal networks associated with learning, the students exhibited an even more troubling behavior.

Interviews with peer mentors retained to assist students that visit the center indicate that signing the attendance roster and sitting in the center does not constitute participating in mentoring activities. The peer mentors reported that most frequently the students in Biology 101 came to the center and spent their time "studying." Basically, they would not engage in conversation with their peers, even when asked what their questions were or if they needed help with the course content in any way. The biology students had simply moved their "study" location for the sake of a few bonus points.

We confirmed the unproductive behaviors reported by the peer mentors through a review of the Student Evaluation of Instruction completed by students in the biology class in question. Some students indicated that they appreciated the opportunity to receive bonus points without any reference to the assistance available. As a positive attribute of the class, one student commented on that "tutoring is available to students," without any personal reference to participating in the process. Another student indicated that the opportunity to earn bonus points provided him/her an opportunity "to study or review." These comments contribute to our understanding of the lack of improvement in average test scores in spite of the use of the tutoring room.

The findings sketched above indicate that significant improvement in test performance will not take place using the current system of providing evidence that students visited the center. When a student comes into the space provided and simply sits quietly reading notes or the course text, substantial learning of content does not take place. Mentors and mentees must engage in conversations related to course content before neuronal pathways are created or reinforced (James E. Zull. 2002. *The Art of Changing the Brain: Enriching the Practice of Teaching by Exploring the Biology of Learning*. Stylus Publishing, Sterling, VA).

In an attempt to promote this conversation, the program leadership intends to provide conversation starters that mentors can use to initiate conversations about course content. Likewise, the instructional faculty, program leadership, and the McNeese Counseling Center will provide training for mentors in overcoming student resistance to talking about course content. The McNeese Counseling Center is an ideal partner for training programs that will assist our mentors in promoting open communications about course content needed for learning to take place. The Counseling Center has agreed to join us in this endeavor. Holding course content, instruction, and testing constant while altering the behavior of students will give us an opportunity to study a languaging approach to learning.

We will develop leading, open-ended questions that we can supply to peer mentors as the content of the course progresses during the semester. We intend to be aggressive in promoting two-way conversations with mentees to promote the development of the requisite synapses needed for the operation of the complete learning cycle in the brain (Zull, 2002). In addition, we will not certify that a student has visited the mentoring opportunity (and indicate that bonus points have been earned) until a conversation centered on course content has taken place between with a mentor.

#### 3. Contributions

The potential improvements in undergraduate education at McNeese State University envisioned by the McMentor program can be summarized in a short statement: We intend to change the dominant culture on campus from a sink-or-swim approach to higher education from which a relative few profit to a culture dominated by cooperative efforts from which a majority of students can profit. We are trying to break the PCP cycle at a commuter college. Students drive to the campus and stop in the Parking lot, go to Class, return to the Parking lot and leave. The Parking lot-Class-Parking lot syndrome is the route form present mediocrity to future mediocrity. Only a few prosper under this practice; most leave. We want students to spend some time on campus talking about matters of educational interest. If we can get them to stay for some quality peer mentoring, students will persist longer and finish in higher numbers. If we can encourage the students to adopt the "social studying" habits of nursing students and institute a mentoring program successfully among freshman students, improvements will be apparent and institutional capacity will increase, the project will be sustainable, and the project will have scalability as other colleges will join the effort. We cannot say yet if this will happen, but we are progressing through the "effort-assessmentplan-effort" cycle in an effort to improve the outcome of higher education.

#### 4. Project Revisions

The McMentor experience had been an experimental effort of enhance student performance in some gatekeeper courses in the STEM areas. In previous reports, we have indicated some institutional and operational issues that have promoted changes in McMentor. We will get closer to the optimum program with the changes anticipated above in the section titled:

Describe any problems encountered during the last year of project activities. No doubt, the learning will continue.

### Annual Report for Year 2 (ending 6/30/2009)

#### McMentor, summer report 2009

Title: Mentoring at McNeese State University (McMentor)
Post-Katrina Support Fund Initiative, Primarily Education Subprogram

#### 1. Personnel

**Principal Investigator**: <u>L. Harold Stevenson</u>, Professor and Administrator Quality Enhancement Plan and Acting Director of Mentoring

Professor Stevenson is responsible for the day-to-day management of the program including the selection of peer mentors and coordinating the program with faculty teaching the target courses. He reports directly to the Provost/Vice President of Academic Affairs and he has a one-half time faculty appointment in the Harold and Pearl Dripps Department of Agricultural Sciences. The Director of Research Services ensures that the proposed functions of McMentor are carried out and Research Accounting office ensures that all funds are spent in accordance with program objectives and in compliance with financial regulations of the State of Louisiana.

**Co-Principal Investigator**: <u>Nikos Kiritsis</u>, Associate Professor and Dean College of Engineering and Engineering Technology

Dean Kiritsis acts as an internal consultant for the program and ensures that the program meets university expectations

**Co-Principal Investigator:** George Mead, Professor and Dean College of Science Dean Mead acts as an internal consultant for the program and ensures that the program meets the expectations of the College of Science and the university.

**Co-Principal Investigator:** Mark Wygoda, Professor and Department Head, Biological and Health Sciences. Dr. Wygoda acts as an internal consultant and facilitates the selection of courses and faculty that participate in the peer mentoring in Biology courses.

**Co-Principal Investigator:** <u>Sid Bradley,</u> Assistant Professor of Mathematics and Computing Sciences, acts as an internal consultant and facilitates the involvement of McMentor with mathematics courses

**Assistant Professor:** <u>Jay Comeaux</u>, Department of Biological and Health Sciences, is a faculty volunteer; he manages the selection and initial training of peer mentors for placement in appropriate classes

**Director Freshman Foundations and Students in Transition**: Donna Self facilitates the securing of an outside trainer and directs the training of peer mentors, including those working for McMentor

**Assistant Professor**: Duston Hoffman organizes faculty involved in Biology 101-102, Introduction to Biology I and II and Biology 225-226, Human Anatomy and Physiology I and II. He also monitors mentor activity and allows the use of the laboratory dedicated to the departmental course in Mammalogy for mentoring activities conduced by the program. Dr.

Hoffman leads the efforts of the faculty in the indicated courses to involve enrolled students in the mentoring program.

Administrative Assistant: Georgette Shudes provides clerical services to the project. Her contributions include receiving and processing applications from potential mentors, providing information to the decision-makers on the academic records of potential mentors, preparing paperwork needed by the Office of Student Employment, maintaining records of mentor work performance, maintaining a daily record of student participation in the program, managing time sheets and payroll distribution.

#### 2. Activities and Findings

# Describe the major research and educational activities undertaken in this reporting period.

Seven peer mentors served the program by assisting students in all sections of Biology 101 and 225 this reporting period. The peer mentors participated in training sessions with the faculty members in charge of the various sections and attended lectures held in classes for which they were responsible. They then met with students in those classes for mentoring sessions.

# Describe and provide data supporting the major findings resulting from these activities

For the classes in BIOL 101 during the Fall 2008 and the Spring 2009 term in which peer mentoring, an increase was noted in the fraction of students participating due to the efforts of Dr. Hoffman in strongly encouraging students to participate. We changed the operation of the program significantly in the Spring term 2009. The result was a marked increase in tutorials. We participated in 639 tutorials in Spring 2009. The number per week ranged from 12 (first week) to 83. However, 132 or 21% were in the last two weeks of the term just prior to final examinations. In fact, when one looks at the weekly totals, one can see four waves of students seeking assistance during the term. Three waves correspond to the three weekly tests during the term and the fourth was prior to the final. This observation tell us that we need to encourage continuous work rather than just in response to an upcoming test. Nevertheless, we were able to overcome the previously observed results at McNeese.

The efforts of the faculty are critical to student behavior. We also improved the physical space used for the tutoring activity, concentrating everything in one location that could be monitored and controlled during normal "working hours." The use of one room to conduct all student sessions changed the "nature" and effectiveness of what we were doing.

The percent of students receiving grades of either W or F in Biology 101 sections was close to the historical average. We expect that a further strengthening of the program as of the fall term in 2009 in terms of the physical space and student management system will show positive results.

The Board of Regents competency assessed for the Biology 101 course was understanding the scientific method. Specific questions concerning the scientific method were embedded in the final examination. Students were considered proficient if they could answer 4 of the 6

embedded questions correctly. Of the students that completed the course, 100% were considered proficient in term of understanding the scientific method.

#### Describe the opportunities for student training and workforce development

Part One of the ultimate objectives of the McMentor program is to institutionalize the tutoring/mentoring opportunities at McNeese. The campus lacks a comprehensive program to deploy these services to students. Part Two is the development of a culture on campus that is supportive of the idea that a successful college experience is based on the continuous, daily engagement with course content rather than trying to "cram" everything into a few days before a testing experience. Think of a semester as a distance run rather than a series of sprints. Part Two is the purview of the campus-wide course that goes by the name of Freshman Foundations 101. McMentor is at work on Part One. ADD HERE

The undergraduate students that participate in the training and execution of the McMentor initiative will learn techniques and skills needed in the execution of their tutoring and mentoring responsibilities on campus. However, they will also benefit in terms of their own intellectual and ethical development resulting in a net gain when these student leaders assume their positions in the workforce following graduation.

# Describe community development and/or outreach activities your project has undertaken

The community outreach during this year have been limited.

#### Describe any problems encountered during the last year of project activities

The problems encountered during project year one can be summarized in two categories. One: The inability to hire an individual to assist with the development of the McMentor program. As we prepared to start the hiring process, a freeze was placed on state hiring. Since the freeze was lifted at the end of June, the process is starting again to secure the services of an individual to assist with this program. Two: The lack of a positive response to the availability of peer mentoring on the part of the students enrolled in Biology 101. Since we now can get them to participate in the opportunities that we have built for them, the next step is developing the culture of continuous effort. The program alterations intended to correct this problem are given in part 4, Project Revisions.

#### 3. Contributions

The potential improvements in undergraduate education at McNeese State University envisioned by the McMentor program can be summarized in a short statement: We intend to change the dominant culture on campus from a sink-or-swim approach to higher education from which a relative few profit to a culture dominated by cooperative efforts from which a majority of students can profit. We are trying to break the PCP cycle at a commuter college. Students drive to the campus and stop in the Parking lot, go to Class, return to the Parking lot and leave. The Parking lot-Class-Parking lot syndrome is the route form present mediocrity to future mediocrity. Only a few prosper under this practice; most leave. We want students to spend some time on campus talking about matters of educational interest. If we can get them to stay for some quality peer mentoring, students will persist longer and finish in higher numbers. *If* we can encourage the students to adopt the "social studying" habits of nursing students and institute a mentoring program successfully among freshman students,

improvements will be apparent and institutional capacity will increase, the project will be sustainable, and the project will have scalability as other colleges will join the effort. We cannot say yet if this will happen.

The first step in bringing institutionalization of tutoring and mentoring efforts are being t

#### 4. Project Revisions

Two important changes on campus necessitated revisions in the plans for McMentor, both of which were controlled by circumstances outside of the project. Institutionalization of a mentoring/tutoring culture on campus constitutes a third revision of the project. This is a change being instituted, in part, by the McMentor management team.

<u>First</u>, changes were made in the degree requirements for the Bachelor of Science in Nursing. Prior to the changes, students were required to complete two semesters of Anatomy and Physiology, Biology 225 and 226, during the freshman year. In an effort to improve student performance in those courses, the nursing curriculum was changed to include BIOL 101 during the freshman year so that students could be exposed to background preparatory material. This change impacted two of the three courses that formed by basis of the McMentor proposal. A <u>second</u> change impacted the third of courses forming the basis of the proposal, MATH 113. The MATH course moved from a 3-credit hour course requiring three hours of lecture per week to a 3-credit hour course requiring two hours of lecture and three hours of laboratory each week. Both these changes required a delay in the incorporation of peer mentors into the course structure of BIOL 225 and MATH 113.

A <u>third</u> revision in program operations reflects a change in the institution as it relates to mentoring and tutoring. The management of the McMentor program is teaming with the College of Science and the McNeese contingent engaged in the Louis Stokes—Louisiana Alliance for Minority Participation (LS-LAMP) to bring about a structural change in how the institution delivers mentoring services to our students. All three units have experience dealing with mentoring and tutoring. Those experiences were put together to build a better system for the school.

McNeese State University had a fragmented system for delivery of the mentoring services to students. The first point of contact made by first-time, first-year students entering McNeese is through the Department of General and Basic Studies. That unit serves as academic advisors to all traditional incoming students. The department also operated the Learning Center, a tutoring center for the university. Since tutoring and mentoring were not the primary responsibility of General and Basic Studies, the Learning Center operation was not as productive as it could have been. Relying on the LS-LAMP and McMentor experiences, The College of Science stepped up to consolidate tutoring and mentoring services on campus in one place.

The College of Science will operate the Academic Computing and Learning Center in Kirkman Hall on the McNeese campus. McMentor will provide training services and supply peer mentors/tutors who give assistance for BIOL 101-102 and BIOL 225-226 students. The center will provide space and supervisory functions to maintain a collegial atmosphere. McMentor will recruit and train student peers to assist those enrolled in the courses of

interest. Likewise, McMentor will continue the coordination with instructors to ensure that students visit the center on a regular schedule to avoid the necessity of cramming everything into a few days before the test or the final examination (a practice that is doomed to failure because it is contrary to how the biology of the brain works). McNeese will have a new day in the delivery of learning assistance to student.

### Annual Report for Year 1 (ending 6/30/2008)

#### McMentor, summer report 2008

Title: Mentoring at McNeese State University (McMentor)
Post-Katrina Support Fund Initiative, Primarily Education Subprogram

#### 1. Personnel

**Principal Investigator**: <u>L. Harold Stevenson</u>, Professor and Administrator Quality Enhancement Plan and Acting Director of Mentoring

Professor Stevenson is responsible for the day-to-day management of the program including the selection of peer mentors and coordinating the program with faculty teaching the target courses. He reports directly to the Provost/Vice President of Academic Affairs and he has a one-half time faculty appointment in the Department of Biological and Environmental Sciences. The Director of Research Services ensures that the proposed functions of McMentor are carried out and Research Accounting office ensures that all funds are spent in accordance with program objectives and in compliance with financial regulations of the State of Louisiana.

**Co-Principal Investigator**: <u>Nikos Kiritsis</u>, Associate Professor and Dean College of Engineering and Engineering Technology

Dean Kiritsis acts as an internal consultant for the program and ensures that the program meets university expectations

**Co-Principal Investigator:** George Mead, Professor and Dean College of Science Dean Mead acts as an internal consultant for the program and ensures that the program meets university expectations

**Co-Principal Investigator:** Mark Wygoda, Professor and Department Head, Biological and Environmental Sciences

Dr. Wygoda acts as an internal consultant and facilitates the selection of courses and faculty that participate in the peer mentoring in Biology courses

#### Co-Principal Investigator: Sid Bradley

Mr. Bradley acts as an internal consultant and facilitates the involvement of McMentor with mathematics courses

**Assistant Professor:** <u>Jay Comeaux</u>, Department of Biological and Environmental Sciences Dr. Comeaux, a faculty volunteer, manages paperwork related to student employment as well as the selection and initial training of peer mentors for placement in appropriate classes

### Director Freshman Foundations and Students in Transition: Donna Self,

Ms Self facilitates the securing of an outside trainer and directs the training of peer mentors, including those working for McMentor

#### 2. Activities and Findings

# Describe the major research and educational activities undertaken in this reporting period.

Five peer mentors were placed in five pilot sections of Biology 101, Introduction to Biology I. The peer mentors participated in training sessions with the faculty members in charge of the various sections and attended lectures held in classes for which they were responsible. They then met with students in those classes for mentoring sessions.

# Describe and provide data supporting the major findings resulting from these activities

For the classes in BIOL 101 during the Fall 2007 and the Spring 2008 term in which peer mentoring, less than 10 percent of the students availed themselves of the service. This result indicates that we were not able to overcome the previously observed results at McNeese and other institutions utilizing mentoring, tutoring, and supplemental instruction that depends on voluntary participation on the part of students. Despite our best efforts, students just do not participate in voluntary activities. (For changes in policy to combat this circumstance, see part 4, Project Revision below.)

The percent of students receiving grades of either W or F in Biology 101 sections was 62.9 percent, the historical average. This is a reflection of the nonresponsive behavior of students when offered assistance through peer mentoring as reported above. See Project Revision for an outline of the changes that are planned in response to this finding.

The Board of Regents competency assessed for the Biology 101 course was understanding the scientific method. Specific questions concerning the scientific method were embedded in the final examination. Students were considered proficient if they could answer 4 of the 6 embedded questions correctly. Of the students that completed the course, 100% were considered proficient in term of understanding the scientific method.

#### Describe the opportunities for student training and workforce development

In part e, Utility of Final Product of Appendix B, Scope of Services appended to the program application the disjointed nature of the tutoring and mentoring services at McNeese was highlighted. The first step in bringing cohesion to this side of student services was taken under McMentor. Peer tutors and mentors associated with the Freshman Foundations courses, the Write to Excellence Center, and with McMentor will receive joint training on August 12, 2008. Dr. Saundra Y. McGuire, Director Center for Academic Success at Louisiana State University and a frequent trainer for the Southern Association of Colleges and Schools, will be the principal trainer. McMentor will provide a portion of the logistical and financial support for Dr. Saundra McGuire's visit.

The undergraduate students that participate in Dr. McGuire's day-long activities will learn techniques and skills needed in the execution of their responsibilities on campus. However, they will also benefit in terms of their own intellectual and ethical development resulting in a net gain when these student leaders assume their positions in the workforce following graduation.

# Describe community development and/or outreach activities your project has undertaken

The community outreach during this year have been limited to an appearance on the morning and evening news programs broadcasted by the local affiliate of NBC (our only local television station).

#### Describe any problems encountered during the last year of project activities

The problems encountered during project year one can be summarized in two categories. One: The inability to hire an individual to assist with the development of the McMentor program. As we prepared to start the hiring process, a freeze was placed on state hiring. Since the freeze was lifted at the end of June, the process is starting again to secure the services of an individual to assist with this program. Two: The lack of a positive response to the availability of peer mentoring on the part of the students enrolled in Biology 101. The program alterations intended to correct this problem are given in part 4, Project Revisions.

#### 3. Contributions

The potential improvements in undergraduate education at McNeese State University envisioned by the McMentor program can be summarized in a short statement: We intend to change the dominant culture on campus from a sink-or-swim approach to higher education from which a relative few profit to a culture dominated by cooperative efforts from which a majority of students can profit. We are trying to break the PCP cycle at a commuter college. Students drive to the campus and stop in the Parking lot, go to Class, return to the Parking lot and leave. The Parking lot-Class-Parking lot syndrome is the route form present mediocrity to future mediocrity. Only a few prosper under this practice; most leave. We want students to spend some time on campus talking about matters of educational interest. If we can get them to stay for some quality peer mentoring, students will persist longer and finish in higher numbers. If we can encourage the students to adopt the "social studying" habits of nursing students and institute a mentoring program successfully among freshman students, improvements will be apparent and institutional capacity will increase, the project will be sustainable, and the project will have scalability as other colleges will join the effort. We cannot say yet if this will happen.

#### 4. Project Revisions

Two important changes on campus necessitated revisions in the plans for McMentor, both of which were controlled by circumstances outside of the project.

<u>First</u>, changes were made in the degree requirements for the Bachelor of Science in Nursing. Prior to the changes, students were required to complete two semesters of Anatomy and Physiology, Biology 225 and 226, during the freshman year. In an effort to improve student performance in those courses, the nursing curriculum was changed to include BIOL 101 during the freshman year so that students could be exposed to background preparatory material. This change impacted two of the three courses that formed by basis of the McMentor proposal. A <u>second</u> change impacted the third of courses forming the basis of the proposal, MATH 113. The MATH course moved from a 3-credit hour course requiring three hours of lecture per week to a 3-credit hour course requiring two hours of lecture and three hours of laboratory each week. Both these changes required a delay in the incorporation of peer mentors into the course structure of BIOL 225 and MATH 113.

A <u>third</u> revision in program operations was made in response to the failure of the students to respond favorably to the availability of peer mentoring as reported in part 2 above. Experience with attempts to encourage students to participate in activities outside of the classroom has provided an important lesson: Unless a grade is attached to some outside-of-class activity, only a few (often those who do not need the enhanced assistance) will avail themselves of the opportunity. With this observation in mind, the group teaching Biology 101 has agreed to include in the syllabus a requirement to visit with an undergraduate peer mentor at least once every other week for grade credit amounting to 7.5% of the points contributing to the final grade. The program management agreed to provide professional training for peer mentors to increase the probability that the contact between mentor and student will be productive. Additionally, the program has agreed to provide a scheduling mechanism so that the weekly contact can be scheduled.