DIVERSE MENTORSHIP: AN EVOLUTION OF THE UNDERGRADUATE RESEARCH EXPERIENCE

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ABSTRACT

Within the last five academic years (2008-2013), undergraduate research (UR) programs at McNeese State University evolved from a single small science event with a few undergraduate students selected from the College of Science presenting their research to today’s current campus and University of Louisiana System-wide events. The current “McNeese State University Undergraduate Scholar and Research Symposium” engages all disciplines and all six colleges on campus – Business, Education, Engineering, Liberal Arts, Nursing, and Science. This event has been spearheaded by the McNeese Alumni Association since its inception and continues to grow due to the overwhelming support by university administrators, alumni, students who continue to see the significance of engaging in their selected discipline, and, most importantly, devoted faculty members who realize that UR programs in and out of the classroom can be both academically and professionally rewarding. McNeese State University is primarily a teaching institution whose mission is successful education of undergraduate students with the ability to work and live in and contribute to diverse communities in its region. However, incorporating UR in diverse disciplines has led to partnerships and successes unimaginable five years ago. By participating in the UR program, students have found discipline-related employment, built their portfolios for application to professional schools (e.g., graduate, medical and veterinary schools), enhanced their professional communication skills and self-confidence, and ultimately have become more engaged with their selected disciplines. These successes are achieved with incorporating active year-long faculty mentoring strategies to encourage and educate faculty members in the principles and practices of mentorship, led to faculty members from diverse disciplines participating in UR mentorship. This project will present lessons-learned in building a cadre of diverse mentors and other considerations to promote UR mentoring and UR student engagement at a predominantly teaching institution. Future strategies for growth include a performing and visual arts component, research experience transcript designations, and UR work-study opportunities.

PROGRAM DEVELOPMENT

Pre-Academic Year 2008-2009
- Monetary support to get the program started sponsored by the McNeese Alumni Association. Over time (2008-2014), funding has been reestablished to directly support student and mentor research, presentation, and travel expenses.

Academic Year 2008-2009
- Undergraduate Scholar Program committee established
- Undergraduate Scholar program coincided with the university’s Quality Day (now called “Quality Day/Wake”) event. A faculty mentor from each academic department was selected to work with a student or students on a scholarly project. A written component describing the project, findings, and objectives was required.
- Developed mentor training with regard to the themes of teaching, research, and communication skills. Tri-fold posters were presented on tabletops along with any support material and demonstration equipment.
- Research report required for each Undergraduate Scholar’s project
- Panel of alumni and faculty selected to judge poster competition
- Funds awarded to students per project ($750)
- Dean, faculty, parents and limited guests were invited to attend the academic day that included undergraduate scholars, College of Science researchers and Quality Day participants.

Academic Year 2009-2010
Same as Academic Year 2008-2009 with the following changes:
- Participation in the program was approached in one of two ways: (1) interested students who sought out faculty supervision for their projects or (2) faculty members who invited undergraduate students in their scholarly activities.
- Funds awarded to students per project ($750)
- Projects deemed “Best in Section” received an additional $750
- Sections included: Business, Education, Engineering, Liberal Arts, Nursing/General and Basic Studies, and Science
- Panel of community stakeholders selected to judge poster competition
- The McNeese Alumni Association provided up to $150 to defray project costs

Academic Year 2010-2011
Same as Academic Year 2009-2010 with the following changes:
- Undergraduate program coincided with the university’s Quality Day/Wake event. A faculty mentor from each academic department was selected to work with a student or students on a scholarly project. A written component describing the project, findings, and objectives was required.
- Developed program structure that included participation requirements, judging rubrics for poster and writing competitions, judging, selection, and an awards ceremony.
- Tri-fold posters were presented on tabletops along with any support material and demonstration equipment.
- Research report required for each Undergraduate Scholar’s project
- Panel of alumni and faculty selected to judge poster competition
- Funds awarded to students per project ($1,000)
- Dean, faculty, parents and limited guests were invited to attend the academic day that included undergraduate scholars, College of Science researchers and Quality Day participants.
- The McNeese Alumni Association provided up to $150 to defray project costs

Academic Year 2010-2011
Same as Academic Year 2010-2011 with the following changes:
- Provided tri-fold poster boards each year to USRS participants
- Purchased and provided easels for poster display
- Undergraduate Scholar Program coincided with the university’s Quality Day/Wake event. A faculty mentor from each academic department was selected to work with a student or students on a scholarly project. A written component describing the project, findings, and objectives was required.
- Developed program structure that included participation requirements, judging rubrics for poster and writing competitions, judging, selection, and an awards ceremony.
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- The McNeese Alumni Association provided up to $150 to defray project costs

Academic Year 2011-2012
Same as Academic Year 2011-2012 with the following changes:
- Undergraduate program coincided with the university’s Quality Day/Wake event. A faculty mentor from each academic department was selected to work with a student or students on a scholarly project. A written component describing the project, findings, and objectives was required.
- Developed program structure that included participation requirements, judging rubrics for poster and writing competitions, judging, selection, and an awards ceremony.
- Tri-fold posters were presented on tabletops along with any support material and demonstration equipment.
- Research report required for each Undergraduate Scholar’s project
- Panel of alumni and faculty selected to judge poster competition
- Funds awarded to students per project ($1,000)
- Dean, faculty, parents and limited guests were invited to attend the academic day that included undergraduate scholars, College of Science researchers and Quality Day participants.
- The McNeese Alumni Association provided up to $150 to defray project costs

Academic Year 2012-2013
Same as Academic Year 2011-2012 with the following changes:
- Undergraduate program coincided with the university’s Quality Day/Wake event. A faculty mentor from each academic department was selected to work with a student or students on a scholarly project. A written component describing the project, findings, and objectives was required.
- Developed program structure that included participation requirements, judging rubrics for poster and writing competitions, judging, selection, and an awards ceremony.
- Tri-fold posters were presented on tabletops along with any support material and demonstration equipment.
- Research report required for each Undergraduate Scholar’s project
- Panel of alumni and faculty selected to judge poster competition
- Funds awarded to students per project ($1,000)
- Dean, faculty, parents and limited guests were invited to attend the academic day that included undergraduate scholars, College of Science researchers and Quality Day participants.
- The McNeese Alumni Association provided up to $150 to defray project costs

MENTOR SUPPORT

- Established Faculty Mentor Forum to acknowledge the dedication of faculty mentors and to answer questions regarding the undergraduate scholarship/research program
- Developed educational materials for new faculty mentors
- Developed guidance for faculty mentors who were unfamiliar with presenting posters
- Held Faculty Mentor Appreciation Lunches with the President and Provost in attendance that included a faculty mentor forum to acknowledge the dedication of faculty mentors and to answer questions regarding the undergraduate scholar and Research Symposium (USRS)
- Increased recognition and support for participating faculty mentors through news articles and other outreach initiatives
- Provided tri-fold poster boards each year to USRS participants
- Purchased and provided easels for poster display
- Undergraduate program coincided with the university’s Quality Day/Wake event. A faculty mentor from each academic department was selected to work with a student or students on a scholarly project. A written component describing the project, findings, and objectives was required.
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CONCLUSIONS AND FUTURE DIRECTIONS

Conclusions
- Initially, the program had projects from students in the College of Science to next including projects from students in the College of Engineering to requested participation from each academic department across campus. The program is now called the “McNeese State University Undergraduate Scholar and Research Symposium” engages all disciplines and all six colleges on campus – Business, Education, Engineering, Liberal Arts, Nursing/General and Basic Studies, and Science. This event has been spearheaded by the McNeese Alumni Association since its inception and continues to grow due to the overwhelming support by university administrators, alumni, students who continue to see the significance of engaging in their selected discipline, and, most importantly, devoted faculty members who realize that UR programs in and out of the classroom can be both academically and professionally rewarding. McNeese State University is primarily a teaching institution whose mission is successful education of undergraduate students with the ability to work and live in and contribute to diverse communities in its region. However, incorporating UR in diverse disciplines has led to partnerships and successes unimaginable five years ago. By participating in the UR program, students have found discipline-related employment, built their portfolios for application to professional schools (e.g., graduate, medical and veterinary schools), enhanced their professional communication skills and self-confidence, and ultimately have become more engaged with their selected disciplines. These successes are achieved with incorporating active year-long faculty mentoring strategies to encourage and educate faculty members in the principles and practices of mentorship, led to faculty members from diverse disciplines participating in UR mentorship. This project will present lessons-learned in building a cadre of diverse mentors and other considerations to promote UR mentoring and UR student engagement at a predominantly teaching institution. Future strategies for growth include a performing and visual arts component, research experience transcript designations, and UR work-study opportunities.

Future Directions
- Investigate funding support for publication costs and professional conference presentations by USRS participants
- Expand the USRS program to identify and match financial aid-supported students in current work study programs with faculty mentors in different academic departments to introduce research and scholarly activity
- Investigate the development of a process for a Research Fellow designation on transcripts for undergraduate students successfully completing an undergraduate research experience meeting specified criteria
- Encourage partnerships between professional communities, stakeholders, the university, and undergraduate researchers through sponsored events, proposals, and community engagement
- Explore links between the McNeese Internship Program and undergraduate research