LIVING-LEARNING COMMUNITY IN SUPPORT OF STEM EDUCATION

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The major goal of the project was to provide scholarships and academic support to students pursuing undergraduate degrees in STEM (Science, Technology, Engineering, and Mathematics), who then entered graduate STEM programs or joined the workforce in STEM fields. This presentation was possible because of an NSF (National Science Foundation) S-STEM Scholarship grant awarded to Robert Morris University (RMU) in 2008, # 0806927. Eligible students received a $6,000 scholarship each of their four years at RMU. The S-STEM Scholars also participated in a two-week math and science boot camp, an intense introduction to their first math and sciences courses, before the start of their first semester, and also took part in community service projects together. Those students who chose to live on campus, lived together in the same residence hall their freshman year. The STEM Scholars excelled academically as they continued to participate in service projects individually and/or with other campus organizations over their four years to fulfill their Student Engagement Transcript (SET). The SET is a transcript of extracurricular activities that students receive upon graduation in addition to their academic transcript.

The students met with their academic advisors throughout the year on a regular basis. It was extremely important for them to meet to schedule their future courses and have a continuous mentorship in their field of study. The students had the opportunity to participate in the Math, Science, Information Technology (MSIT) Interview Day at Robert Morris University in addition to attending the Career Expo. Participating STEM companies fell into the following categories: actuarial science, engineering, and environmental science. In the past, various other companies have participated in the RMU Career Expo as well as offer internship opportunities. Internships
and research projects are mandatory in our disciplines and our students completed these experiences during their time with us.

The cohort started in 2009 and graduated in 2013. The retention rate after their freshmen year was 95%. In the end, the cohort was comprised of seven (7) students each in engineering and science and six (6) in mathematics with a total of 12 males (60%) and 8 females (40%). Overall, the STEM Scholars performed well and outperformed their peers academically. The cohort performed fairly well over their first three years with a cumulative GPA (QPA) of 3.43. The average GPA for other students in the program was 3.24. Students with a GPA below the 3.00 mark were counseled, reminded of the requirement, and placed on probation for one semester. When looking at the STEM Scholars performance for the Spring 2013 semester (right before graduation) they did extremely well as this was their best semester performance. The average GPA for the Spring 2013 semester was 3.62. The engineering students had an average GPA of 3.77, mathematics was 3.43, and science was 3.57. The average QPA of 3.46 shows their performance has been consistent over their four years of study.

This concludes that the STEM Cohort students delivered strongly both academically and professionally. The concept of a Living-Learning Cohort along with the support offered by the University and the school in tutoring, mentoring and advising was crucial for students’ success.