I. Project Goals

• Enculturate new students into STEM community at BSU
• Promote success in first MATH class
• Develop faculty pedagogical expertise and practice to effectively support student success/student retention
• Build a culture/community that supports early research experiences for lower division STEM majors

II. Strategies to Achieve Goals

• Create a common STEM Orientation program with deliberate branding for STEM majors
• Create a series of STEM Learning Communities (SLC’s) to facilitate student success; develop GenSci class for non Calc ready students
• Encourage math review by students; intentionally consider staffing in freshman math courses to promote learning and success
• Form STEM Faculty Learning Communities
• Create Undergraduate Research internships in STEM fields

III. Implementation Progress in Year One; Opportunities Year Two

• Engaged faculty during summer orientation sessions from across all STEM disciplines and promoted STEM culture to over 320 students
• Opportunity to make advising more effective by revising sequence of orientation events
• Over 204 students from all STEM majors enrolled in 13 STEM Student Learning Communities (SLC)
• Opportunity to expand the awareness of value and benefit of SLC and STEP grant offerings
• Three sections of General Science were taught (based on Wright State University’s curriculum)
• Math Review Year One Results
• Approximately 80 students voluntarily participated in an online math learning system, ALEKS®. 21 spent between 5 – 15 hours with 17 passing their subsequent math course
• 12 students spent 15 hours or more in review; with an average review time of 30.4 hours, all students passed subsequent math courses
• First STEM Faculty Learning Community launched
• Opportunity arose mid year to hold a first best practices in STEM pedagogy symposium

IV. Challenges

• Summer orientation Year 1 activity revealed an unmet need for science and math course availability for freshman–working with registration to streamline course drop process to keep seat availability up-to-date
• Developing a summer bridge program for URM students for summer 2011

V. Unintended Consequences

• Big changes in how summer registration will occur
• Provost office is planning to accommodate science and math freshman course needs
• Realized larger synergy with STEM Station institutional grant

Quotations from student participants in summer math review

"If you take the time to practice, it may not make you perfect, but it will make you better everyday.”

"The ALEKS program really did help keep me refreshed on my math skills over the summer. ALEKS explained everything really well, with step by step examples.”

"Don’t let other people’s negativity put you down, instead use it as inspiration to prove them wrong.”

"Think Success: Gain Success!”