College Ready
In Mathematics and Physics
Partnership

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Gay Stewart, PI
Pete Joenks, co-PI
Charles Stegman, Chief Evaluator
Gary Standridge, Partnership Manager

Mission Statement

The mission of the College Ready in Mathematics and Physics Partnership is to enhance mathematics and physics learning for all students in its partner districts and teacher-preparation programs in partner institutions, closing achievement gaps, and preparing students for success in mathematics, science, and teaching careers. This will be achieved by building learning communities of 7-12 teachers and college faculty that foster and nurture smooth access to, productive disposition toward, and preparation for success in college.

Overview

Successes and Challenges as they relate to:

- Goals and Objectives
- Identification, Engagement and Sustainability of the Partnership
- Professional Development
- Creating Professional Learning Communities
- Transition from High School to College
- Evaluation and Data Collection

Goals and Objectives

- Enhance mathematics and physics learning
- Enhance teacher preparation programs
- Close achievement gaps
- Success of college graduates in STEM areas and teaching careers
- Facilitate the transition from high school to college

Identification and Engagement of the Partners

- Identification of partners
- Primary: two IHEs, 38 school districts in two states
- Supporting: three professional organizations, two non-profits, one IHE and one center
- Implementation
- Organizational structure and governance

Partnership Driven

- Reciprocity and mutual benefits
- Effective communication
- Environment of trust and mutual respect

Effective Professional Development

- Meet the needs of 7-12 teachers
- Focus on substantive knowledge in mathematics and physics
- Organize pedagogy around content-focused inquiry-based courses
- Model effective teaching
- Utilize summer institutes and follow-up

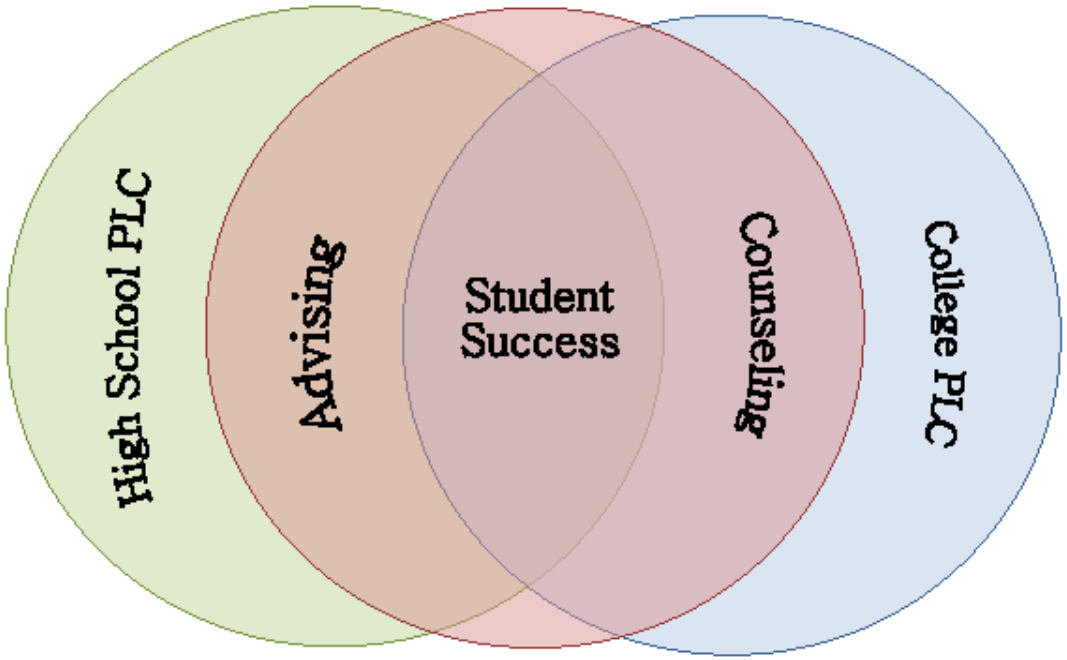
Professional Learning Communities

- Build learning communities including college faculty around master teachers
- Link professional development to teacher classroom behavior
- Create peer-coaches
- Focus on student achievement
- Understand role of administrators in facilitating PLC's
- Long-term sustainability of MSP

Transition from High School to College

- Articulation across disciplines (mathematics and physics)
- Articulation from middle-level (7-8) to high school (9-12) to college
- Communication and collaboration
- Difficulties in transition

Articulation Model for Student Success



Teacher Preparation and Recruitment

- Curriculum changes in mathematics, physics and education
- Professional development for higher education faculty
- Recruitment of mathematics and physics students for teaching careers

Evaluation and Data Collection

- Evaluator Involvement
- Organization: Evaluation Committee
- Formative Evaluation: Summer Workshops
- Summative Evaluation: First Year Issues

Contact Information

Gay Stewart: gstewart@uark.edu

Gary Standridge: cgs@uark.edu

Charles Stegman: cstegman@uark.edu

College Ready Office

Email: collegeready@uark.edu

Phone: (479) 575-2862

Website: http://collegeready.uark.edu