

# Proposal Concept Form

## TEEM UP for K-12

**Institution:**

Rowan University

**Team Members (names & e-mails):**

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**Area of Focus (in-service, pre-service, student outreach, etc.):**

In-service and pre-service

**Project Description:**Pre-service

Develop General Education course in engineering/technology that satisfies new NJ teacher certification requirements

Develop a path for engineering students to NJ certification as math or technology teachers

In-service

Work within existing in-service training programs to develop engineering topics, modules, activities

**1. Needs Assessment (communities served)**

–General college population and in- and pre-service teachers need more exposure to engineering and technology

–Some small number of engineering students are interested in teaching in K-12 as a primary or secondary career path; currently, there is no clear route to advise these students to take

**2. Project Background / Rationale / Supporting Research**

–Currently, there is no contact between the three Colleges involved (Liberal Arts, Education, Engineering)

–There is interest from engineering faculty members to work with K-12 programs

–There is interest from engineering students to pursue K-12 teaching after engineering

–The College Deans are very interested in cross-college collaborations

–Accreditation body for Education is interested in such collaborations

–Newly instituted changes in NJ certification for middle-school science/math teaching

**3. Project Organization / Management / Partnerships**

Pre-service: work closely with Education and Mathematics partners, especially as Education restructures its curriculum in response to new NJ certification requirements

In-service: work within existing programs on campus – Education Institute and MCSSIP (Mathematics Department)

Continue and expand discussions started at TEEM-UP to include other interested parties

#### **4. Specific Objectives**

1. Development of a General Education course in engineering/technology
2. Engineering will participate in in-service teacher training and activities
3. Develop a path for engineering students to become teachers as another career path

#### **5. Marketing Plan**

Leverage off of Deans' and individual faculty members' leadership

Our plan is well timed with provisions in NCLB, changes in NJ teacher certification requirements, College of Education reorganization and curriculum change

#### **6. Budget / Funding Strategy / Sustainability**

What we are planning will not require additional funding; it fits within the existing programs and funding

We will seek federal funding to encourage the involvement of other faculty members, to involve students in the programs, and to help economically disadvantaged schools

Encourage researchers to participate in our programs as part of their projects/proposals to fulfill the 'outreach or broader impacts' portion

#### **7. Timeline**

-This semester: Continue and expand our discussions and planning to develop and implement the plans begun here

-Fall 2004: present our course proposal(s) to the University Curriculum Committee for approval

#### **8. Evaluation / Accountability**

We will focus on metrics for evaluation and accountability:

1. Has a path been developed for engineering students to become K-12 teachers? (May 2004)
2. By fall 2004, use #1 as a recruiting tool to attract students into engineering, and measure the gains
3. By fall 2004, develop program within existing in-service teacher training programs, including an evaluation component
4. By fall 2004, develop General Education course for pre-service teachers and general college population