



**SECME** INC.

*Miami-Dade County Public Schools  
Curriculum and Instruction (Science)*

# **Getting Students And Other Staff Involved**

*Revised 2008*

## WAYS TO INVOLVE STUDENTS

Monthly planning and strategy meetings  
Agenda might include but is not limited to:

- Contests
- Field trips
- School calendar of events
- Engineering Faculty Consultant visits
- Guest speakers from industry, professional organizations
- Bulletin board displays
- Newsletter
- Program evaluation
- SECME reports
- Mentoring

Successful programs also utilize students as much as possible in planning and coordinating contests, programs, and other events. Encourage them to take a leadership role and have the responsibility of handling as much as they are capable of handling. Train them! This is good experience for them and a wonderful growing opportunity. They will need to develop their potential in these roles to be successful in college and in the real world of work. And don't forget to give them plenty of opportunities to speak before groups – both large and small. Communication skills are very important.

**Once you have a core group of students trained, have them train the newer student participants. This too is a valuable experience.**

Some suggested activities that you might consider incorporating into your SECME program **as time and resources permit**:

### **Faculty Team:**

To involve many students, the development of a strong SECME team of teachers is recommended. Using this strong team, divide responsibilities and as a first item on your agenda, recruit parents, community members, and business and industry to support your efforts. The most successful SECME programs have a **TEAM** of teachers working together:

### **School Program Events:**

- Kick-off event – Pep rally, reception, tea, etc. with student leadership, student speakers, and student worker bees
- Year-end event – Awards banquet with trophies and certificates
- Feeder pattern SECME program/activities

- Parent programs – SECME orientation, preparing students for college entrance, how to help students study, how to help students manage their time, etc.
- Seasonal or thematic events – Christmas, Thanksgiving, Easter, etc.
- Speakers and Demonstrations – Host school-wide assemblies or classroom speakers and demonstrations: Inspirational/motivational speakers, careers, science/math demonstrations inviting:
  - SECME Engineering Faculty Consultant (UM-David Poole, FIU-Stephanie Strange)
  - Local industry leaders
  - Local civic leaders
  - Local clubs and organizations such as the Optimist Club
  - Professional organizations such as the National Society of Black Engineers (NSBE), Society of Hispanic Professional Engineers (SHPE)
- Videos: Motivational and/or career oriented such as those produced by the American Chemical Society’s “Working It Out”
  - ✓ Check-out videotapes from District SECME office
- Field trips:
  - Universities are great places to visit – arrange to have a minority student guide(s) and let the student talk with your students;
  - Middle schools and high schools should take advantage of District SECME trips and shadow opportunities for students.
- Contests:
  - Participate in school-wide and district-wide contests: Science fair, college bowl, tallest and strongest tower, bridge building, physics olympics, fraction munchers, public speaking, float a boat, egg drop, paper airplane, robotics, Bluebird nesting box building, SECME mousetrap, essay, water bottle rocket, poster and banner contests, JETS, MathCounts, etc.
- Themes:
  - Develop school-wide SECME themes each month: SECME T-Shirt day, Black history month, engineering week, etc with student leadership and production.
- Preparing for College:
  - PSAT, SAT, PACT, ACT test preparation
  - Begin student preparation for the college application process i.e portfolios that document student leadership, involvement in extra-curricular activities, competitions, honors and awards, writing essays

that present the student as a serious and capable applicant, setting goals, time management, etc.

- Invest in a SECME Portfolio
  - Be sure to attend the District SECME Scholarship Information workshop
- Outside School Opportunities:
    - Encourage students to participate in local university pre-college programs and check into scholarships for students of lesser means.
    - See Saturday Engineering Design Seminars offered by the District SECME staff.

### **School Program Enhancement:**

- Program proposals – Initiate proposals for funding support of special events. (Note: industry loves to see cooperative efforts and it is suggested that proposals be written for several schools working together).
- Host student-led cooperative study groups.
- School publicity for SECME (i.e., dedicated SECME newsletter or column in existing school newsletter).

The sky is the limit! **Brain storm and let others help you make your SECME program all you dreamed it could be.** And don't forget all the wonderful resources you have right inside your school.

### **Important Websites:**

***National SECME Website:***

**[www.secme.org](http://www.secme.org)**

***District SECME Website:***

**<http://science.dadeschools.net/secme/default.html>**

***NACME: National Action Council for Minorities in Engineering***

**[www.nacme.org](http://www.nacme.org)**

***National Engineers Week***

**[www.eweek.org](http://www.eweek.org)**

***Especially for Students***

**[www.discoverengineering.org](http://www.discoverengineering.org)**

***Society of Hispanic Professional Engineers***

**[www.shpe.org](http://www.shpe.org)**

***Society of Women Engineers***

**<http://societyofwomenengineers.swe.org/>**

***National Society of Black Engineers***  
<http://national.nsbe.org/>

## **SECME SCHOOL TEAM BUILDING**

The building of a core team is essential to a successful SECME school program.

### **I. IMPORTANCE**

- A. To Assure Success of program
  - 1. Set goals
  - 2. Plan activities
- B. Provide Resources and Support
- C. Receive Full Benefits of SECME
- D. Encourage SECME Students' Contact with all Teachers

### **II. BUILDING THE TEAM**

- A. Start With What Exists and Improve
- B. Must Sell Principal/School Administrators on Program
- C. Present to Entire Staff
  - 1. Show video
  - 2. Students and other team members

### **III CORE TEAM MEMBERS**

- A. School Coordinator
- B. Principal
- C. Teachers and Colleagues
- D. Parents and Boosters
- E. Students

## SCHOOL COORDINATOR'S CHECK LIST

The school coordinator is the team developer and motivator, manages the collection of school data, and facilitates planning of student activities and team meetings. The team identifies SECME students and encourages them to enroll in recommended classes. The following check list of school coordinator's activities has been provided to assist you in planning your program.

### Activities

### Action/Date

Plan a SECME school and community awareness Program. (Develop a calendar of events.)

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Schedule team meetings for the year

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Involve all team members and have each be responsible for at least one team activity such as collecting longitudinal data, planning study groups, and coaching math or science teams

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Recommend to District Program Director, the teachers/ counselors, administrators, parents to attend National SECME Summer Institute

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Send school information and longitudinal data forms to SECME by the request date

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Coordinate the annual school SECME student contest per information from the District SECME office. Top winners participate at the District SECME Olympiad/Festival.

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Coordinate plans to organize a SECME Parent/ Community Organization.

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Coordinate students to participate in field trips related to careers in engineering, mathematics or science

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Announce testing dates and plan student Preparation sessions for taking PSAT/PACT and SAT/ACT.

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Distribute scholarship information to students.

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Assist students with the completion of scholarship and financial aid application material (emphasize the need to meet deadlines and complete all Requirements).

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Coordinate/participate in feeder pattern SECME activities

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Communicate with District SECME office.

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