PARTNERSHIPS WITH VOCATIONAL EDUCATION

Louise Chiatovich, Director of Women's Programs

California State University, Sacramento
School of Engineering and Computer Science

MECCA PROGRAM PURPOSE

MECCA (Making Elective Court for Career Achievement) programs are model efforts to interest young women in math and science based careers through active programs at the secondary level. Models are sponsored by the California State Department of Education with Carl Perkins Vocational Educational Funding.

MECCA PROGRAM DESCRIPTION

Mecca Programs represent avenues to involve women in Engineering at an early age and can be subsidized partnerships with collegiate programs. Programs select a group of women students with potential interest or abilities. Subject curriculum must have a math/science and industrial technology focus, include female role models, use hands-on activities and study groups as part of the program. Programs may occur during school, after school or on weekends. Louise Chiatovich, Director of Women's Programs in the School of Engineering at California State University, Sacramento provides technical assistance to the ten model programs which will double in number in 91-92. Mecca models provide statewide connections to Engineering outreach programs in the postsecondary institutions.

SAMPLES OF CURRENT MECCA MODELS

1. Atwater High School, Merced Union High School District Carlene Logan, Project Director, (209) 357-6051,

Atwater High School: Project serves 40 students yearly in a continuous program for 9-12th grades. Students participate in Equals Workshops to gain interest; weekly meetings include teaching in Science, Math, and Industrial Technology
(CAD/Drafting) and engineering field trips. Students are enthusiastic and teachers have enjoyed more personal relationships with students.

2. Simi Valley Unified School District
   Jacque Richardson, Program Director, (800) 5526-0200 ext. 299

   Simi Valley chose 10th and 11th grade girls from the Expanding Your Horizons Conference attendees and offered field trips, tutoring in math and science, SAT prep, and forged a link with the electronics industry for tours and penpals for students. Mecca is now reaching grades 8 and 9 with high school student ambassadors.

3. North Orange County Regional Occupational Program
   Laureene Manseau, (714) 776-2170

   North Orange County ROP focused on the high female attrition rate at Troy Tech Magnet Program at Troy High School; provided two-part workshops to girls at 10-12th grade in career awareness and confidence building. Mecca used role models and customized field trips to develop the awareness of real career choices and great technical opportunities for young women.

**STEPS TO FOLLOW TO CREATE A PROGRAM**

First Phase: Planning, Publicity, Selection

1. Use team approach in selection of students, curriculum development with subject and career related material, and choice of career focus.

2. Publicize: Use school bulletins, flyers, class talks, role model demonstrations and presentations, parent letters.

3. Calendar activities, projects, events with role models, and field trips for program duration.

Second Phase: Implementation

1. Convene group frequently, but not enough to disrupt other schedules; arrange consistent meetings; initially during school time helps develop initial commitment.

2. Alternate hand-on activities with field trips and role model presentation to keep interest and
motivation. Make connection with higher education engineering majors and opportunities.

3. Follow up fun events with research on the career or in-depth study based on the activity. Create team approach in studies, reports, and projects.

4. Utilize tool, vocabulary, and/or spatial relations sessions to familiarize students with technical areas.

5. Connect with engineering associations, SWE (Society of Women Engineers), local industries and WEPAN (Women Engineering Program Advocate Network) for resource people.

6. Acknowledge, reward, and celebrate the accomplishments of the group. Utilize first groups as role models, outreach, and recruiters for younger students to enter the program.

Third Phase: Evaluation, Replication

1. Plan achievement banquet or event to thank students, parents, role models, and educators or industry involved.

2. Document activity evaluations, program evaluation from all groups concerned.

3. Present program to teacher groups, district groups, School Boards, and community groups to replicate, sponsor, or continue the program.

4. Plan replication with corrections and ideas learned from first year program.

Carl D. Perkins Act Goals and Features

1. Send funds to LEAs, stipulating a minimum amount and disbursements to areas in greatest economic need.

2. Serve four important populations:
   * Economically Disadvantaged
   * Disabled
   * Limited English Proficient
   * Equity Needs

3. Serve Corrections education at state and local levels.

Women in Engineering Conference: A National Initiative
1991 WEPAN National Conference
4. Use funds locally for:
   * Program Improvement
   * Services for Special Populations
   * Integration of Academic and Vocational Education.

5. Emphasize prevocational and comprehensive guidance and counseling.


7. Retain and protect sex equity programs and programs for single parents, displaced homemakers, and single pregnant women.

8. Provide a new state role in monitoring and evaluation.

9. Continue support for state leadership activities and student vocational clubs.

10. Support the tech-prep concept, including linkages to apprenticeship.

**BASIC STATE GRANT ALLOCATION**

Each state has the same percentage allocations as shown in the diagram. Funding amounts are for California.

**HOW TO MAKE EDUCATIONAL LINKAGES WITH VOCATIONAL EDUCATION**

1. Contact the sex equity coordinator for your state. These people must be designated for each state and are located in the State Department of Vocational Education.

2. Contact your local school district and/or community college, vocational dean or vocational education department. Offer to help design a consortium to assist women in entering math/science and technical occupations, with emphasis on the opportunities in engineering-related fields.

3. Areas in which you can collaborate:
   * Co-sponsor MECCA program models.
   * Include technical opportunities for 9th grade career counseling for young women.
* Assist in modifying curriculum to include hands-on engineering-related math/science/industrial technology application activities.

* Assist in providing teacher inservice activities to explore careers and options in engineering for women.

* Co-sponsor engineering and technical conferences aimed at women students.

CONCLUSION

Linkages with industry and postsecondary training options are a must for young people to prepare for demands of the technical workplace. Carl Perkins Vocational and Applied Technology Act encourages local education consortiums. Partnerships to assist women in Math/Science career exploration are excellent strategies encouraged by the Act. Such partnerships can develop engineering interests in young women and utilize resources that are committed to gender equity in education.
California Appropriation: $86.8 Million

Tech Prep Education $6 Million
Consumer & Homemaking Education $3 Million
Community-Based Organizations $1 Million
Special Programs

Secondary, Adult & Postsecondary

Basic State Grant Allocation

$57.7 Million
$3.8 Million
$6.5 Million
$8 Million
8.5% 10.5% 1%

Local Funds
Equity
Corrections
State Leadership
State Administration

75%