

September 16, 2003

DIRECTIVES: JOB CORPS INFORMATION NOTICE NO. 03-07
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TO: ALL JOB CORPS NATIONAL OFFICE SENIOR STAFF
 ALL JOB CORPS REGIONAL DIRECTORS
 ALL JOB CORPS CENTER DIRECTORS
 ALL JOB CORPS CENTER OPERATORS
 ALL NATIONAL TRAINING AND SUPPORT ONTRACTORS
 ALL OUTREACH, ADMISSIONS AND CTS CONTRACTORS

FROM: RICHARD C. TRIGG
 National Director
 Office of Job Corps

SUBJECT: FIRST Robotics Pilot Program Overview and Program Replication
 Resources

1. Purpose. To inform the Job Corps community about an effective pilot program that enhances students' math, science, and life skills, and to provide guidance for program replication.

2. Background. The Collbran Job Corps Center, through a partnership with U.S. For Inspiration and Recognition in Science and Technology (FIRST) and Women in Community Service (WICS), created a team of students, instructors, and community volunteer mentors that participated in a national robotics competition. The competition is coordinated by US FIRST, a national not-for-profit organization, with the intent of building self-confidence, knowledge, and life skills in young people while motivating them to explore opportunities in science, technology, and engineering.

The robotics competition process is a cooperative effort involving students, instructors, corporations, and the community. The Collbran robotics team, named Eagle Corps, was comprised of four instructors, 16 mentors, and 51 students representing all center trades. Beyond the core team working on designing and building the robot, 149 additional students were involved in the activities supporting the robotics project including designing the competition web site, producing a video, creating computer-aided drafting (CAD) drawings of the robot, researching the partnering companies, producing a brochure, and other associated tasks.

In addition to comprehensive center involvement, the community was also integrally involved in the project. A total of 16 professional engineers from local technology companies including 3-D Systems, CoorsTek, Kortec Industries, and GPD Global, volunteered as mentors

and helped the students to design, build, and compete the robot. The engineers offered their knowledge of software programming, engineering, and electronic wiring to the robot's construction. Local entities provided funding for the Eagle Corps team, including NASA, Raytheon, J.D. Edwards, and the Colorado WICS volunteers.

3. Pilot Outcomes. The robotics pilot program resulted in a number of positive outcomes for Collbran, including student retention; enhancement of students' science and math skills; increased employability skills and opportunities; scholarship opportunities for college education; increased community involvement with the center; and positive press for Job Corps. A key factor facilitating the positive outcomes is the alternative-learning environment provided through the robotics competition process where students translate science and technology theories into fun "real world" applications.

4. Robotics Program Replication Guidance. For centers interested in creating a robotics team and competing in the US FIRST robotics competition, the following resources are available:

- The WICS Denver Regional Office is available to act as a liaison between interested centers and US FIRST — facilitating registration, regional contacts, and locating an established team to mentor the center. Additionally, WICS can provide program information materials, an in-depth competition overview, and fund development guidance.

Contact Information:

Jo Dawn Newlon
WICS Director of Training and Evaluation
1391 N. Speer Blvd., Suite 405
Denver, CO 80204
(303) 893-5373
E-mail: wicsrkymtn@aol.com

- The Collbran instructors leading the Collbran team are available to answer questions and provide technical assistance regarding planning, logistics, and general advice to centers interested in developing a team.

Contact Information:

Alan Anderson, High School Math
Terry Harrington, High School Science
Keith Ross, Job Corps Math
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The Eagle Corps team web site provides additional information:
<http://www.eaglecorps.ws/>

- Centers are encouraged to attend a regional competition to see the process first-hand. Regional events and other information related to developing and registering teams can be found on the US FIRST web site at: <http://www.usfirst.org>.
- Additional information can be found on the Job Corps Career Development Center web site: www.jccdrc.org.

5. Robotics Competition Timeline. The planning and preparation for the robotics competition can take place year round. In order to effectively compete, teams need to raise money, recruit mentors, and establish a team. The more significant months of the process are detailed below:

- September: Competition registration
- October: Starter kit of parts is shipped to teams
- January: Kick-off event and robot kit received
- March to April: Regional competitions nationwide
- April: Final championship competition

For a more detailed description of events, please visit the US FIRST website timeline at: http://www.usfirst.org/robotics/frc_time.htm

6. Action. Addresses are to ensure that a copy of this Notice is distributed to the appropriate staff.

7. Expiration Date. Until superseded.

8. Inquiries. Inquiries should be addressed to Tessa Hale at 202-693-3878, or email to hale.tessa@dol.gov.