A Southeastern Partnership to Broaden Participation in Computing

The STARS Alliance is a system of regional partnerships among academia, industry, K-12 and the community to strengthen local BPC programs.

The cornerstone activity of the STARS Alliance is implementation of the STARS Leadership Corps within each regional partnership. The Corps is a group of college students with a common mission to recruit, develop, and become the next generation of computing professionals through service leadership. The Corps challenges students to reach their personal best in computing, while bringing younger students into the discipline.

The Corps is a repeatable one-year program that begins in August with the STARS Celebration, an alliance-wide conference to celebrate Corps student achievements and induct new members. Celebration sessions reinforce the STARS Central Values of Technical Excellence, Leadership, Community, and Service and Civic Engagement, while calling students to help fill the national need for a larger, more diverse computing workforce. Students respond by committing to leadership projects to undertake with local partners at their home institutions. Projects are broadly classified as: Outreach to pre-college students to inform and excite kids about computing; Peer outreach to other college students and mentoring slightly younger students; Community service to work with nonprofits to serve society with computing; and Research Experiences and Internships to serve by improving one’s own expertise in computing.

The STARS Central Values are that Technical Excellence, Leadership, Community, Service and Civic Engagement lead to student recruitment and advancement.

Leadership Projects are existing programs shown to be effective for BPC. The Corps puts a common “wrapper” around these to support an extended community among participants and cohesive evaluation across organizations.

The STARS Leadership Corp Model
The STARS Alliance serves as an incubator for new demonstration projects and the scaling and replicating of best practices among diverse Alliance institutions.

- Alliance-wide dissemination of **Pair Programming** increases student retention and success in gate-keeper computing courses.
- **Have a mentor. Be a mentor. Tiered Mentoring and Role Modeling** fosters a computing community and computing identity through common service.
- **Culturally Situated Design Tools** uses cultural artifacts to engage K-12 students in computing.

### Proudest Accomplishments in First Three Years

- The STARS Leadership Corps has increased students’ commitment to computing, interest in graduate school and participation in outreach for 480 college student participants in more than 24 colleges and universities and has touched thousands of K-12 students, parents, teachers and guidance counselors.
- The STARS Celebration has provided a sense of inspiration for BPC practices and a sense of community for over 600 participants from four BPC Alliances over three years.
- The STARS Alliance is providing strong professional collaborations for faculty across areas of tenure preparation and research progress.

The STARS Alliance has engaged me to use computing to make a positive impact by exposure to other areas of technology and to be of service to other students and community members. It has provided them (middle school students) access to computing resources. It has allowed them to see women and minorities as role models. - Corps Student

### Summary of Results

#### STARS Leadership Corps – Student Results

- **Increased commitment to computing** majors (88%) and formed **meaningful relationships** with faculty & peers (95%) - supporting retention.
- **Increased interest in graduate school** (83%) & helped others understand the value of computing (90%) – supporting recruitment (>15 graduating seniors enrolled in grad school for Fall 2007!)
- **Developed computing skills** and knowledge (83%) – supporting bridging.
- Had opportunities to work with people like themselves (88%), supporting the goal of creating a “like” community
- Helped others **understand the value of computing** (90%) – supporting recruitment

#### STARS Celebration – Participant Results

- Provided **community building** opportunities (97%).
- Emphasized how computing and IT professionals can help **improve quality of life** (83%).

### Contacts

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