

CSTEP: Transferring Computer Science Community College Students to Four-year Universities

Abstract

With national and local statistics showing a dramatic decrease in undergraduate and graduate enrollment in Computer Science along with the new admission restrictions at our state universities, the University of South Florida has partnered with Hillsborough Community College to establish a series of coordinated programs designed to broaden the participation of underrepresented minority students in Computer Science. These programs are used to recruit, retain, and prepare Hispanic and African-American community college students to continue on their path toward a four-year university. This session will include an overview of our programs, a discussion on why major-specific transfer programs are necessary, how to fund such programs, summarize the implementation, share struggles and problems encountered, and present the initial results.

Objectives

- *Demonstrate how to increase the enrollment of minority students in Computer Science programs.*

CSTEP generates interest in Computer Science through the use of informational materials, personalized identification, advising, and tracking activities. The marketing includes information on why Computer Science is an attractive and viable career. CSTEP specifically targets Hispanic students as they constitute a high percentage of the student population at HCC.

- *Present our programs that retain students in Computer Science.*

CSTEP offers summer program scholarships, personalized advising service, mentoring at USF and HCC, paid research experiences for undergraduates, a peer tutoring program, and professional development opportunities. All of these programs are used to recruit, retain, and prepare community college students to continue on their path toward a four-year university.

- *Communicate how to bridge students from community colleges to four-year universities and graduate school.*

CSTEP offers two summer programs with strong math, programming, and research components. These components are taught in formal courses that, if passed, will allow the students to be admitted to the Department of Computer Science and Engineering directly, bridging the students from HCC into USF.

- *Reveal an exportable and expandable model.*

CSTEP creates a clear educational path that could be applied at other community colleges and universities.