Transforming Open-Access Colleges as a Path to Upward Mobility

The innovation in this project is its **data-driven implementation of a comprehensive set of program elements** that remove administrative barriers, provide targeted academic support, and instill high expectations and grit, so that traditionally underrepresented students can succeed and excel in college.

**Key features:**

- Student cohort at the center
- Emphasis on high demand computer science major, addressing California’s economic needs and helping bridge the diversity gap in the technology field
- Student focus is entirely on academics and grit
- Agile institutions that adapt to best support student success and academic outcomes
Program Description

California State University Monterey Bay and Hartnell College have designed and implemented a cohort-based, accelerated Bachelor of Science degree program in Computer Science. The program represents a new model for bachelor's degree completion centered on cohort learning communities, community college/university partnership, and clearly defined, accelerated course pathways as mechanisms for improving enrollment, retention, academic success, transfer, graduation and post-graduation placement for underrepresented students in the high demand field of computer science.

The initial cohort began in fall 2013. Cohort 3 has started their pre-college math and computer science preparation and will begin courses in fall 2015. While students primarily take courses at Hartnell for the first half of the program and at Cal State Monterey Bay for the second half, they are integrated into both campuses through cross-enrollment and cohort enrichment activities.

Current Enrollment and Demographic Data

<table>
<thead>
<tr>
<th>Enrollment</th>
<th>Demographics</th>
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</thead>
<tbody>
<tr>
<td>Cohort 1:</td>
<td>First Generation: 80%</td>
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<tr>
<td>Cohort 2:</td>
<td>Hispanic: 80%</td>
</tr>
<tr>
<td>Cohort 3:</td>
<td>Female: 35.4%</td>
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</tbody>
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Results-To-Date

- **Transfer rate:** 27 out of 32 cohort 1 students transferred from Hartnell to Cal State Monterey Bay, compared to the typical, non-cohort CS transfer rate of 3 students per year.
- **URM Graduation:** In spring 2015, 1/6 of Hispanic and 1/10 of women CSU CS graduates are estimated to come from Cal State Monterey Bay, compared to spring 2014 when only 1/30 of all CS graduates came from Cal State Monterey Bay.
- **Graduation rate:** Cohort 1 is on track to achieve an 84% graduation rate in 3.5 years.
- **Academic quality:** For summer 2015, multiple students are being considered for or have been placed in internships at Apple, Cisco, Facebook, Language Line, Salesforce, and Uber.
- **Degree cost to student/family:** Through community college/university partnership and a pre-defined degree pathway that results in on-time graduation, the total tuition and fees cost for a bachelor’s degree through this program is under $15,000.

Sustainability and Future Challenges

- **Continued, data-driven improvement of academic quality.** The goal is for graduates to compete with students from any top computer science program in the country for jobs and post-graduate academic opportunities. Developing feedback loops, internships, and proactive partnerships with industry is key to improving curriculum and support activities to achieve this goal.
- **Institutional changes to adapt and sustain program elements.** In order to sustain the programmatic and student academic outcomes for the long term, existing institutional structures and processes must adapt effective elements from this program.

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