BOLD: BROADENING OPPORTUNITY THROUGH LEADERSHIP AND DIVERSITY

Access, Retention and Performance trend updates
Historic enrollment of diverse first-year students (836 total)

- 233 women (27.9%) – up 32% from last year’s 177
- 120 URM (14.4%) – up 17% from last year’s historic 103
HISTORIC RESULTS
CU URM & FEMALE UNDERGRADUATE ENROLLMENT

National 19.3%
National 16.9%
HISTORIC RESULTS
ENGINEERING SIX-YEAR BS GRADUATION RATE BY GENDER
HISTORIC RESULTS
BS SIX-YEAR GRADUATION RATE MINORITY STUDENTS

Pushing Boundaries

BOLD as an Educational Research-to-Practice Incubator
And, 23% of college-wide first-year students taking Pre-calculus this fall!

Demonstrates BOLD as a leader in engineering education innovation...
CALCULUS I WORKGROUPS AND 2ND YEAR RETENTION

Fall 2012 Calculus I Results Breakdown

- All in Calculus I: 73% retained
- All in WG: 84% retained
- All No WG: Only 69% retained
- BOLD Women in WG: 83% retained
- BOLD Men in WG: 86% retained
- BOLD Men No WG: Only 33% retained

Average course GPA

N = 537
N = 161
N = 376
N = 48
N = 43
N = 6
DEVELOPMENTAL USE OF ALEKS: GOLDSHIRT SUMMER BRIDGE PREPARATION

New in 2013: met students where they were in math readiness… divided into two mastery levels with differentiated content… expected to invest in math skill development before arriving at GoldShirt Bridge

Lowest level Pre-Calculus preparation
- Math Pre-assessment Score (4-7)
- ALEKS Placement Score (20-70)
- ACT Scores (18-26)

Time Working in ALEKS: 31 hours
ALEKS Mastery Growth: 26 percentage points

Higher level Pre-Calculus preparation
- Math Pre-Assessment Score (8-10)
- ALEKS Placement Score (60-90)
- ACT Scores (21-29)

Time Worked in ALEKS: 53 hours
ALEKS Mastery Growth: 29 percentage points
DEEP DIVE:
CREATING CAPACITY

Taking Access & Recruiting to the Next Level

Amanda Parker
Green Valley Ranch High School
9th, 10th & 11th grades

Green Valley Ranch Middle School
6th, 7th & 8th grades

First Seniors in 2015

Free & Reduced Lunch: 68%

Boys: 47%
Girls: 53%

Caucasian: 10%
Hispanic: 44%
Asian: 5%
African American: 35%
Mixed Race/Other: 6%
COLE HIGH SCHOOL
to open in 2014
COLE MIDDLE SCHOOL
6th, 7th & 8th grades (fully enrolled in 2013)

FIRST SENIORS IN
2018

FREE & REDUCED LUNCH 74%

BOYS 52%  GIRLS 48%

AFRICAN AMERICAN 23%

ASIAN 4%

HISPANIC 54%

MIXED RACE /OTHER 3%

CAUCASIAN 16%
KEY BOLD CHALLENGES

• Colorado demographics and college growth trajectory \(\rightarrow\) must *create capacity*
  • Flat supply of engineering-ready minority students
  • Interest in STEM among teen girls is declining (CO only 4% interested in engineering)
  • Maintaining climate of inclusion as college grows…

• Competitive scholarship size for minority students

• Accelerating GoldShirt student success
  • First cohort: all who will graduate will do so in five years
  • Different breed of student: low income, ELL, first generation to complete high school
  • Incentivize more with laddered scholarships?

• Seizing DSST opportunity: making CU’s majority dominant, high income environment *accessible and attractive enough* for well prepared urban students of color
• Congratulations!!!
• BOLD, BAC and Foundation – Develop successful funding strategy and action steps to bolster scholarship endowment
• BOLD - Refresh analysis on scholarship “sweet spot” (amount, number) to maximize access and retention
• BOLD - Prioritize ideas and develop resource requests for creating a pipeline of college-ready URM, first gen and female students
• BAC and BOLD Task Team - Develop action plan to take GoldShirt program to next level of academic performance and retention

“Climate of scholarship, critical resources, and community that were critical to my success”
Graduation Scorecard

The key measure of success for the BOLD programs is the quantity (as a percentage of engineering graduates) and quality (measured by graduating GPA) of BOLD graduates. The performance goal is parity with the college graduating GPA; the diversity goal is parity with the state’s student population by the 2020 First Year cohort.

Focus Areas

Graduation Rate

The long-term graduation rate goal is for women and underrepresented minorities to echo the retention rate of majority students. Thus, the benchmark is graduation parity as a percentage of first-year students entering six years earlier. However, this scorecard highlights four-year graduation rates of CU engineering students, who have the highest median time (4.33 years) to degree on the CU campus (top left graph). CU women have a higher four-year graduation rate than men (lower left graph). The graduation rates of URM students is rising while first-gen students consistently have the lowest four-year graduation rate (upper right graph). Women’s four-year graduation rates showed steady increases, but dropped in 2012 (lower left graph). Low income students - e.g., those on Pell grants – have markedly lower graduation rates (bottom right).

GPA

Academic preparedness of graduates is paramount, and the most direct quality measure is graduating GPA. Predicted GPA is a good indicator of retention; students who entered with strong predicted GPAs had the highest four-year graduation rate, while the majority of those who struggle academically (actual GPA falls below 2.0) will not graduate in four years (middle right).

Student Voice

• 2013 College Senior Survey:
  • “The BOLD Center is a positive force on campus...”
  • Majority men may resent the resources provided to BOLD students “Reverse racism is way more prevalent than actual racism; nobody gets the last piece of the pie like the white male.”
• 2011 Post-Graduate Survey (~8 months after B.S. graduation):
  > 75% have jobs, >16% are in graduate school and ~5% still looking

BOLD Center and College Voice

• Expanding the tutoring program to include an online environment (new for Fall 2013) might enable BOLD to support struggling students early on so their GPAs do not drop below 2.25, leading to probation or suspension and a longer time to graduation.
• First-generation students have the lowest four year graduation rate, indicating a need for BOLD and College support.

Environmental Considerations

• Numerous departments are implementing flipped classroom strategies; hopefully this will lead to improved student retention.