1. The Sullivan Alliance to Transform America’s Health Professions
2. Center for Urban Education, the Rossier School of Education, the University of Southern California
# Race and Ethnicity of U.S. Population Compared to National Health Professionals

Sources: US Bureau of Census; AMA; ADEA; APA: HRSA

<table>
<thead>
<tr>
<th></th>
<th>Non Hispanic White %</th>
<th>Hispanic/Latino %</th>
<th>AAPI %</th>
<th>Black/African American %</th>
<th>American Indian/Alaskan Native %</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Population (2008)</td>
<td>75</td>
<td>15.4</td>
<td>4.4</td>
<td>12.4</td>
<td>0.8</td>
</tr>
<tr>
<td>Physicians (2006)</td>
<td>55.8</td>
<td>5.0</td>
<td>12</td>
<td>3.5</td>
<td>0.02</td>
</tr>
<tr>
<td>Dentists (2001)</td>
<td>86.3</td>
<td>3.3</td>
<td>6.9</td>
<td>3.4</td>
<td>0.1</td>
</tr>
<tr>
<td>Registered Nurses (RNs)</td>
<td>81.8</td>
<td>1.72</td>
<td>2.9</td>
<td>4.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Psychologists (2004)</td>
<td>82.7</td>
<td>4.6</td>
<td>1.4</td>
<td>3.3</td>
<td></td>
</tr>
</tbody>
</table>
Community College as a Route to Health Careers

- Nearly **60%** of Latinos in higher education are in community colleges
  - Of these, **56%** attend Hispanic-serving CCs
- **44%** of all STEM BS holders attend CC at some point in their career
- **20%** of Latino STEM bachelor’s degree holders also have associate’s degree

Sources: DoE, NSF, CUE
The Role of CA Community Colleges

- By 2020, Latinas/os will represent 40% of California’s working population (ages 26 - 64)

- Less than 10% of Latinas/os in California have earned the baccalaureate, compared to nearly 40% of White population

- Gaps in educational attainment impact per capita income, negatively impacts tax base

- CA will fail to meet its workforce needs by 2012

Sources: National Center for Higher Education Management Systems; Chronicle of Higher Ed
A Leaky Pipeline: The Basic Skills Pathway

- 80% of CCC incoming students are not prepared for credit-level courses
- 40% of students enrolled in basic skills courses are Latino
- 40% of Latino students aspire to transfer; few do
- 50% of students in basic skills math, English or ESL do not return after their first semester

Goal: Strengthen pre-collegiate education
MISCONCEPTIONS ABOUT EQUITY

- Develop **awareness** of race-based inequities in educational outcomes
- View inequities in outcomes as a problem of institutional accountability
EXAMPLES OF OUTCOMES:
• Degree/certificate attainment
• Participation in honors program
• Migration through basic skills
• Transfer to four-year institution
• Graduate school enrollment
THE CUE Equity Model: Including Equity in the Inquiry Process

**Problem:** Inequity in Educational Outcomes

**Faculty, Ad’rs (Student Affairs, Deans, Dept Chairs), IRs**
**Examine and Interpret their Data**

**Practical Knowledge of the Nature of Inequity**

*Theory of Change:* Learning and change among practitioners are socially constructed and facilitated by their engagement in a collaborative and productive activity setting (Based on work of Roland Tharp)

- **Problem Addressed:** Institutional challenges in producing equitable educational achievement.
- **Method:** An activity setting designed to bring about learning and change among practitioners whose knowledge, attitudes, and practices impact student outcomes.
How Data Inquiry Helps

The CUE Equity Model:

- Disaggregate data by race/ethnicity
- Analyze/interpret data to identify “gaps” or disparities in metrics of student achievement
- Collaborative reflection on findings
- Prioritize goals for informed interventions

*NOT* a quest for assigning blame
Focus on improving **student outcomes**
Benchmarking Equity and Student Success Tool (BESST)

Math 3 levels below transfer

START
50 Students Enroll

18 don’t succeed
32 succeed 64%

Math 2 levels below transfer

24 Enroll 75%

7 don’t succeed
17 succeed 70%

Math 1 level below transfer

12 Enroll 70%

3 don’t succeed
9 succeed 75%

Transfer Level

5 Enroll 60%

10% of Original Cohort

END

8 don’t proceed

5 don’t proceed

4 don’t proceed

50 Students Enroll
African-American students experience unequal outcomes in course success.

Math faculty use inquiry tools to uncover causes of inequities.

Informed Interventions
- Intervention addressing identified cause

Evaluation of Interventions
- Evaluation of implemented Intervention

Inquiry into the Causes
- Gaps

Data
- Course Success Rate in Elementary Algebra
Data

MIGRATION THROUGH MATH: An Example from Urban City College

• Students who begin their math sequence in MATH 4 levels below transfer level
  – First enrolled in MATH 100 in Fall 2003

• Tracked Fall 2003 to Spring 2007 for success in subsequent math courses
### Migration Table for Math

<table>
<thead>
<tr>
<th>Ethnicity/Race</th>
<th>1st Enroll MATH 110 or 110A Fa 03</th>
<th>Successful in MATH 110 or 110A</th>
<th>% of Orig. Cohort</th>
<th>1st Enroll MATH 130 or 130A</th>
<th>Successful in MATH 130 or 130A</th>
<th>% of Orig. Cohort</th>
<th>Enroll Transfer Level Math</th>
<th>Successful in Transfer Level Math</th>
<th>% of M110 or 110A students who were able to complete Tr. Math</th>
</tr>
</thead>
<tbody>
<tr>
<td>African-American</td>
<td>116</td>
<td>52</td>
<td>44.8%</td>
<td>31</td>
<td>26.7%</td>
<td>20</td>
<td>64.5%</td>
<td>18</td>
<td>15.5%</td>
</tr>
<tr>
<td>Asian/PI</td>
<td>134</td>
<td>79</td>
<td>59.0%</td>
<td>57</td>
<td>42.5%</td>
<td>38</td>
<td>66.7%</td>
<td>30</td>
<td>22.4%</td>
</tr>
<tr>
<td>Filipino</td>
<td>53</td>
<td>33</td>
<td>62.3%</td>
<td>17</td>
<td>32.1%</td>
<td>10</td>
<td>58.8%</td>
<td>7</td>
<td>13.2%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>290</td>
<td>181</td>
<td>62.4%</td>
<td>128</td>
<td>44.1%</td>
<td>74</td>
<td>57.8%</td>
<td>63</td>
<td>21.7%</td>
</tr>
<tr>
<td>White</td>
<td>163</td>
<td>102</td>
<td>62.6%</td>
<td>69</td>
<td>42.3%</td>
<td>44</td>
<td>63.8%</td>
<td>43</td>
<td>26.4%</td>
</tr>
<tr>
<td>Total</td>
<td>829</td>
<td>478</td>
<td>57.7%</td>
<td>320</td>
<td>38.6%</td>
<td>196</td>
<td>61.3%</td>
<td>174</td>
<td>21.0%</td>
</tr>
</tbody>
</table>

**Data**
What is the student doing (or not doing) that leads to inequitable educational achievement?

- Focus on student’s background
- Focus on student indeterminacy of goals

- Also “blame” problems on poor K–12 preparation, instead of focusing on how to help students succeed.
What are the institutional challenges that result in inequitable educational outcomes?

- How are our practices failing our students?
- What is going on in the classrooms that we can change?
- Why do we need to make a change?

- Shift from “blaming the student” to taking institutional responsibility for student success
SYLLABUS REVIEW:

Teacher’s instructions to Pre-Algebra students assume they have Algebra skills and reinforce math phobias or that they don’t “belong”

TO CALCULATE YOUR COURSE AVERAGE:

\[ CA = 0.1x \text{HW} + 0.1x(E1+E2+E3+E4+E5+E6)+0.2xFE \]
<table>
<thead>
<tr>
<th>TYPICALLY CONTAINED</th>
<th>DID NOT CONTAIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Course description</td>
<td>• Expected learning outcomes</td>
</tr>
<tr>
<td>• Faculty contact info/office hours</td>
<td>• Student expectations</td>
</tr>
<tr>
<td>• Course content</td>
<td>• Encouraging tone</td>
</tr>
<tr>
<td>• Attendance policy</td>
<td>• Calendar of activities</td>
</tr>
<tr>
<td>• Academic dishonesty policy</td>
<td>• Information re resources for academic &amp; other support</td>
</tr>
<tr>
<td>• Withdrawal policy</td>
<td>• No evidence of instructional variety/culturally inclusive activities</td>
</tr>
<tr>
<td>• Grade breakdown</td>
<td></td>
</tr>
<tr>
<td>• Condescending/punitive tone</td>
<td></td>
</tr>
</tbody>
</table>
EXAMPLES OF CHANGES IMPLEMENTED BASED ON FINDINGS

**LACK OF SOCIAL CAPITAL**
- Integrate academic support services into courses
- Training for faculty—what resources are available

**TIME ON TASK/STUDY SKILLS**
- Five supplemental learning activity hours added to course
- Enhance matriculation process and policies

**CLASSROOM PRACTICES & TEACHER EFFECTIVENESS**
- Development of teaching, learning & assessment center
- Support for assessment of course-level student learning outcomes
### Background of Survey Respondents N=183

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latino</td>
<td>55</td>
<td>48.2%</td>
</tr>
<tr>
<td>White</td>
<td>45</td>
<td>39.5%</td>
</tr>
<tr>
<td>Black/Other</td>
<td>14</td>
<td>12.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>85</td>
<td>72.6%</td>
</tr>
<tr>
<td>Male</td>
<td>32</td>
<td>27.4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of Years Worked at Current Institution</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fewer than 5 Years</td>
<td>46</td>
<td>40.4%</td>
</tr>
<tr>
<td>5 to 10 Years</td>
<td>29</td>
<td>25.4%</td>
</tr>
<tr>
<td>More than 10 Years</td>
<td>39</td>
<td>34.2%</td>
</tr>
</tbody>
</table>
Survey Respondents Involved with Transfer Functions

- No: 36.3%
- Yes: 63.7%
Awareness of CUE Equity Model

![Bar chart showing awareness of CUE Equity Model by awareness status and choice of BESST, EqS, or Either.]

- **Aware**:
  - BESST: 18.8%
  - EqS: 16.1%
  - Either: 28.8%

- **Not Aware**:
  - BESST: 81.4%
  - EqS: 83.9%
  - Either: 71.2%
Are those involved with transfer more likely to be aware of the CUE Equity Model?

![Bar chart showing the comparison of awareness of the CUE Equity Model between those involved in transfers and those not involved. The chart indicates that a higher percentage of those involved in transfers are aware of the model compared to those not involved.]
Awareness of Institution’s Transfer Goals and Goals for Students of Color

- Yes: Overall Goals = 73\%  
  Students of Color Goals = 15.7\%

- No: Overall Goals = 3.4\%  
  Students of Color Goals = 3.4\%

- Don't Know: Overall Goals = 23.6\%  
  Students of Color Goals = 66.3\%
Are persons who are involved with transfer functions more likely to be aware of their institution’s transfer goals?

![Bar chart showing the percentage of persons involved in transfers who are aware of their institution's transfer goals compared to those not involved. The chart indicates that 80.6% of those involved are aware, while 69% of those not involved are aware.](chart.png)
Are persons who are involved in transfer functions more likely to be aware of their institution’s transfer goals for students of color?
To what do survey respondents attribute lack of success of students of color?

- Student Values: 2.6
- Institutional Barriers: 1.6
- Student Circumstances: 2.7

Agreement Score
How do study participants perceive causes of educational disparities for students of color?

- Lower basic skills success: 61.9%
- Lower transfer outcomes: 69.2%

- Lack of student motivation: 36.6%
- Lack of advisor's encouragement: 39.8%
To what do persons aware of the Equity Model attribute lack of success of students of color?
To what do persons aware of the CUE Equity Model attribute low transfer rates among students of color?
How does your institution assess students’ success through Basic Skills courses?

- Persistence through the course sequence: 52.9%
- Grade Point Average: 49.6%
- Qualitative assessment of curriculum and programs: 30.3%
- Data disaggregated by race/ethnicity: 26.9%
What resources are available for transfer or transfer-bound students at your institution?

- Transfer center: 80.8%
- Brochures and handouts: 70%
- Orientation: 50%
- Transfer peer counselors: 23.3%
- Summer bridge program: 17.5%
In Summary

• The majority of respondents were unaware of their institution’s practices regarding transfer for students of color

• Most were unaware of CUE Equity Model

• There is a clear tendency to attribute disparities in academic outcomes to student factors

• Current assessment practices tend to focus on course success

• Data mostly viewed in aggregate

• More than 90% of respondents agreed that understanding reasons for disparities are key to increasing transfer success for students of color
The Sullivan Alliance to Transform America’s Health Professions is a national organization emerging from the Sullivan Commission on Diversity in the Health Professions and the Institute of Medicine’s panel on health professional diversity.

The organization is committed to spurring national action to diversify the health professions as a measure to reduce health and health care disparities and resolve the critical manpower shortage of health professionals. Most importantly, the alliance strives to achieve equity in access to health careers.

Contact us:
• imittman@jointcenter.org
• (202) 789-3553