Leaders, Heroes, Coordinators, Activists: Building Institutional STEM Capacity in HSIs through Networks

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University of Southern California

HSI Outreach Forum
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Pathways to STEM Degrees for Latina and Latino Students

Principal Investigators:
Alicia C. Dowd and Estela Mara Bensimon
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I. Statistical Analyses
II. Interviews and Observations at “Exemplars”
III. Dissemination of Equity-Based Assessment Tools
The Center for Urban Education (CUE) conducts socially conscious research and develops tools needed for institutions of higher education to produce equity in student outcomes.
FUNDING AND BUILDING NETWORKS

Programs → Relationships
Workshops → Joint Productive Activities
Cultural Capital → Professional Competencies
Data → Institutional Funds of Knowledge
THEORETICAL FRAMEWORKS AND KEY CONCEPTS

1. Critical Race Theory
   “Equitymindedness”
2. Sociocultural Learning Theory
3. Cultural Historical Activity Theory (CHAT)
   “Activity Settings”
   “Assisted Performance”
4. Sociology/Social Capital Theory
   “Institutional Agents”
   “Institutional Funds of Knowledge”
5. Practice Theory
   “Practical Wisdom”
ACTIVIST
LEADER
COORDINATOR
HERO
LEADER

- In high status position
- Has access to resources
- Able to convene people
- Sets expectations
HERO

- Program builder
- Grant writer
- Goes the extra mile
- High visibility
- High standards
COORDINATOR

- Makes things run
- Knows the system
- Works the system
- Knows who’s who
- Is student centered
- Creates safety nets
ACTIVIST

- Shared identity and background—a Latino
- Sees inequities—Equity Minded
- A mentor, role model and guide
- Connects students to resources
- A passionate advocate
- Confianza
• Fiscal pressures
• Disconnected from Communities/Students
• Frustrated that students don’t take advantage of resources.
HERO

- Empire building through special programs
- Limited reach
- Exhausts others
- Heroics require victims
COORDINATOR

• Lack of authority
• Disconnected from pedagogy, curriculum, and classrooms
• Competing programs
ACTIVIST

- Outside the "color blind" norm
- Taking the brunt of institutional indifference
- Anger and Cynicism
- Betrayal
Key Questions

What do we need to know to act as institutional agents?

How can we increase our institutional funds of knowledge?
CONDUCT RESEARCH COLLABORATIVELY ON YOUR OWN CAMPUS AND IN PARTNERSHIPS—DO ACTION RESEARCH
BESST Excel Tool

Data Disaggregated by Race/Ethnicity

<table>
<thead>
<tr>
<th>Ethnicity/Race</th>
<th>Completion Rate</th>
<th>Starting Cohort</th>
<th>Milestone 1: Students Who Progress One Class Level</th>
<th>Milestone 2: Students Who Progress to the Subsequent Class Level</th>
<th>End Point: Students Who Graduate from UW Universities</th>
<th>Cohort Graduation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>Successful Completion Rate</td>
<td>33%</td>
<td>30%</td>
<td>24%</td>
<td>46%</td>
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<td># of Students Enrolled</td>
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<tr>
<td>% to original cohort</td>
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<tr>
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<tr>
<td>Southeast Asian</td>
<td>Successful Completion Rate</td>
<td>40%</td>
<td>30%</td>
<td>34%</td>
<td>50%</td>
<td>10%</td>
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<tr>
<td># of Students Enrolled</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% to original cohort</td>
<td>40%</td>
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<tr>
<td>Other Asian</td>
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<td>30%</td>
<td>34%</td>
<td>50%</td>
<td>10%</td>
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<td></td>
</tr>
<tr>
<td>% to original cohort</td>
<td>40%</td>
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<tr>
<td>Native American</td>
<td>Successful Completion Rate</td>
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<td>% to original cohort</td>
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<tr>
<td>White/International Unknown</td>
<td>Successful Completion Rate</td>
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<td>33%</td>
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<td>20%</td>
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<td>% to original cohort</td>
<td>50%</td>
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<tr>
<td>All Students</td>
<td>Successful Completion Rate</td>
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<tr>
<td>% to original cohort</td>
<td>51%</td>
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</table>
# Current Performance for Hispanic Cohort

## Current Performance

**WTCS Students Transferring to UW Universities**

<table>
<thead>
<tr>
<th>Ethnicity/Race</th>
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<th>Starting Cohort</th>
<th>Milestone 1: Students Who Progress One Class Level</th>
<th>Milestone 2: Students Who Progress to the Subsequent Class Level</th>
<th>End Point: Students Who Graduate from UW Universities</th>
<th>Cohort Graduation Rate</th>
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<tbody>
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<td>Hispanic</td>
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<td># of Students Enrolled</td>
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<td>19</td>
<td>5</td>
<td>2</td>
<td></td>
<td>3.5%</td>
</tr>
<tr>
<td>% to original cohort</td>
<td>33%</td>
<td>26%</td>
<td>9%</td>
<td>4%</td>
<td></td>
<td>3.5%</td>
</tr>
</tbody>
</table>

**Starting Cohort:**
- 33% of the Hispanic cohort enrolled in the program.
- 19% of these students successfully progressed to the next class level.
- 9% of the students who progressed to the next class level successfully graduated.

**Cohort Graduation Rate:**
- 3.5% of the original cohort graduated from UW Universities.

**USC Rossier School of Education**
BUILD IN ASSESSMENT AND EVALUATION AS CENTRAL ACTIVITIES OF YOUR INITIATIVE
Use Inquiry to Define Problems

Observe Data
- Take stock of student outcomes
- Identify inequities within and across groups

Find the Gaps

Inquiry into the Causes
- Utilize equity-based assessments to better understand the problems
- Set benchmark goals to close gaps in student success

Set Goals

Informed Solutions
- Create solutions that are contextualized by inquiry findings
- Evaluate effectiveness of the new solutions

Evaluation of Solutions

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From Best Practices to Effective Solutions

Data → Gaps → Inquiry into the Causes

Evaluation of Solutions → Setting Goals → Informed Solutions → Effective Solutions

Progress: Is the Equity Gap Closing?
Without an Assessment Plan... 

• Are we doing what we intended to do?
• Are we making progress?
• Do we agree on what progress means?
BECOME HISPANIC
SERVING BY
ADOPTING
EQUITYMINDEDNESS
AS A GUIDING PERSPECTIVE
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