Culture of Inclusion and Diversity

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Education and Diversity co-Director

NSF/DOE Virtual Site Visit
November 9, 2020
CURENT Core Values

1. **Equality** - All principles in CURENT apply equally to all persons in the Center
2. **Respect** - All persons are equally entitled to respect and appreciation
3. **Safety** - All persons are entitled to share without diminishment of value.
4. **Growth** - All persons in CURENT, and the Center itself, should be fostered to continually grow and improve. All persons are entitled to equal access to opportunity.
5. **Accountability** - All persons in CURENT have responsibility to promote and embody the core values of the Center.

Our efforts on Diversity and Inclusion enhance and enable CURENT to **deliver on our mission**

Overview of Center Demographics and Programs

DIVERSITY

A collection of individual attributes that together help the ERC pursue organizational objectives efficiently and effectively.
SMART Criteria for Success: Diversity Planning

• Developed in coordination with NSF in February 2016
  – Used to help guide activities to improve diversity in CURENT

• Assessed yearly in Year 5+
  – All metrics for Year 5 and Year 6 were met on-time
  – Remaining metrics are long-term CURENT goals
Previously-Completed SMART Metrics

**SHORT-TERM (COMPLETED BY YEAR 5 SITE VISIT)**
- Develop consistent branding approach
- Grow UG involvement in CURENT
- Identify and connect with targeted recruitment universities
- Survey incoming graduate students
- Increase representation of domestic graduate students
- Formalize closed-loop planning of education activities

**INTERMEDIATE (COMPLETED BY YEAR 6 SITE VISIT)**
- Outreach to Minority Undergraduates and MS Students
- Continue broad and targeted graduate student recruitment
- Grow UG involvement in CURENT (cont.)
- Increase representation of minority students in CURENT
- Maintain strong gender diversity among students in CURENT
Long Term SMART Metrics

LONG-TERM (COMPLETED AND SUSTAINED DURING LIFETIME OF CURENT)

• Maintain graduate student racial diversity
  – Metric: Graduate URM domestic student percentage is 2x greater than national averages for electrical engineering
  – Result: Active Y9 graduate students 2.4x EE average for URM

• Maintain graduate student gender diversity
  – Metric: Graduate female student percentage is 2x greater than national averages for electrical engineering
  – Result: Female Grad student percentage (17%) below EE average (23%)
    ▪ Incoming Fall 2020 graduate students: 29% Female

• Grow population of domestic graduate students
  – Metric: Obtain and sustain more than 25 active US citizen CURENT graduate students
  – Result: 38 active US citizen graduate students in Y9

• Maintain UG involvement in CURENT (cont.)
  – Metric: Maintain G/UG ratio of 2.0 or below throughout the life of the center
  – Result: Met in Y5 and maintained through Y8. Y9 ratio is 2.6, above target.
    ▪ Revisions in recruiting practices needed during pandemic
Enrolled Student Population

Undergraduate Cohort

Graduate Cohort
Benchmarking Student Diversity

- CURENT student representation significantly above EE/ENG averages for
  - Female (UG)

*Data available 2000-2017. Y7-Y9 compared to 2017 data
Benchmarking Student Diversity

- CURENT student representation significantly above EE/ENG averages for
  - Female (UG)
  - URM (G & UG)
- Below average for Hispanic (G & UG) and Female (G)

- **Y9 URM student representation**
  - 2.5x national average for grad students
  - 4x national averages for UG students

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*Data available 2000-2017. Y7-Y9 compared to 2017 data*
Additional Metrics on Diversity

Leadership Team (13 persons)
- 4 female (30\%*)
- 2 report disabilities (15\%*)

Faculty (39 persons)
- 10 female (26\%)
  - One new hire started Jan 2020
- 2 URM (8\%) + 1 URM non-citizen
- 1 Hispanic (4\%)

New collaboration with AAAS Entry Point! led to two REU students

*No associated metric for comparison

Green numbers lead national averages

[Green text]
Recruitment Activities

Pre-COVID
• Focus on personal interaction
  • TLSAMP, NSBE, SHPE, SWE Conferences
  • Technical workshops and conferences
  • Open House events
• Internal recruitment through
  • Departmental seminars
  • REU and semester undergraduate research
  • Senior design projects
  • College engineering fair

Post-COVID
• Continue recruitment in-house
• Participate in virtual conferences and events
• Boost digital and and social media presence
A set of behaviors and norms (expected behaviors from group members), procedures and practices that optimize the benefits inherent in our diversity and encourage all students, faculty and staff to feel valued for their unique qualities and to experience a sense of belonging and fairness.
SVT Comments from Year 8

1. In addition to utilizing Pope Consultants as coaches and thought leaders, the SVT highly recommends *incorporating the expertise readily available on each partner school’s* campus into the Center.

   Additionally, effort still needed for cross-campus integration. Significant progress made on institutionalizing efforts at the campus-level in Y9.

2. The current number of **female domestic graduate students** slightly decreased in comparison to previous years but given the retention of undergraduate students into the graduate schools, the Center believes this goal will be met once again in the near future.

   Continued effort needed, focusing on pulling from UG population which is about 2x national average for EE gender diversity. New graduate students in Fall 2020 were 30% female, indicating an upwards trend for AY 2020-21.

3. The SVT strongly recommends an **intentional focus on preparing** all Center participants in working with those with limited or different abilities.

   Two students recruited through Entry Point! were mentored by the Director of Education and Diversity. Prior to their arrival, we communicated with the students and their existing support network at their home institution to ensure we had all resources and planning in place.

4. Finally, the SVT would like to see the Diversity and Culture of Inclusion area broken out in the **functional budget** and expenditure reporting. This is yet another method of demonstrating priorities.

   This year, a budget of $100k was allocated to D&I efforts, with expenditures as reported in the annual report.
# Y8 External Evaluator Recommendations

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Target Audience</th>
<th>Target Area of Improvement</th>
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</thead>
<tbody>
<tr>
<td><strong>1. Tiered Mentorship Programs</strong></td>
<td>CURENT students</td>
<td>Stronger sense of support and community, continued beyond freshman year</td>
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<td>Created new cross-campus mentoring program with three student-pairs from RPI and UTK</td>
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<td><strong>2. Cross-campus Events &amp; Communication</strong></td>
<td>CURENT students, staff, and faculty</td>
<td>Stronger sense of community throughout all CURENT campuses</td>
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<td>Continued deployment of Slack and Officevibe; many weekly center-wide social activities during communication.</td>
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<td><strong>3. Compensation Evaluation</strong></td>
<td>CURENT students, staff, and faculty</td>
<td>Stronger sense of fairness and equality, stronger sense of appreciation</td>
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<td>Discussed in All Hand Meeting with Students, in weekly staff meetings</td>
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<td><strong>4. Internship Application Evaluation</strong></td>
<td>CURENT international students</td>
<td>Perception of CURENT’s culture and fairness</td>
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<td>Planned revision to dissemination in advance of Summer 2021</td>
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<td><strong>5. Sexual Orientation Training/Workshops</strong></td>
<td>CURENT students, staff, and faculty</td>
<td>Better understanding of sexual orientation terminology</td>
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<td>Invited seminar from Dr. Stephanie Bohon, UTK Dept. Head of Sociology &amp; co-director of Center for the Study of Social Justice Safe Zone Training – UTK Pride Center (6 faculty/staff participants)</td>
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Center Communication Structure

- Public, flat communication structure
  - Avenues for formal/informal communication
  - Improved organization of communications
  - 188 members, >150 messages per day

- Anonymous feedback and reporting
  - Biweekly pulse surveys (5-10 questions)
  - Feedback/reporting anytime
  - Trends discussed openly in research group meetings and center-wide all-hands meetings
Officevibe as a Conversation Catalyst

• Survey data used to guide conversation within groups/Center
• Data publicly available and discussed openly
• CURENT implementation guiding principles
  – CURENT wants to hear every voice
  – Every response warrants discussion
  – Goal is continuous improvement
• Anonymous feedback and reporting available anytime
  – Option for manager to reply while maintaining anonymity
Officevibe Pulse Surveying Results

• Standard set of survey questions
  • 10 Metrics
  • 26 Sub-metrics
  • 120 questions

All responses coded so that 10/10 is an optimal response

COVID-19 Pandemic
Ambassadorship
Feedback
Relationship with Peers
Satisfaction
Alignment
Happiness
Wellness

Target: eNPS > 30
Pandemic Impact

- Monitored impact of COVID-19 via
  - Officevibe survey supplement (7 questions)
  - Internal survey (10 questions)
  - Additional questions in external evaluation (3 questions)

- Trends in responses
  - Higher stress, uncertainty, lower social connection
  - Desire for increased opportunities to connect and socialize
  - Concern over graduation timeline among students
  - Concern over increased workload among staff, faculty
  - Difficulty in work/life balance
Pandemic Social Activities

- Weekly Jackbox Game Night
- Social Meetings
- Biweekly Technical Reading Group
- Netflix Party / Teleparty
- Monthly All Hands Meetings
- Group Social Check-in
- Levity in classes
External Consultant

• External consultant through Year 10
  – Report to Council of Deans
  – Examine strategic plan and develop operational plan

• Hired Pope Consulting
  – Contract executed May 2nd 2019
  – Initial reports delivered to Council of Deans

“At Pope Consulting, we firmly believe that diversity and inclusion aren’t just buzzwords. As long as organizations need people to achieve their goals, diversity and inclusion will be either a tremendous source of strength or weakness. They will rarely be neutral.”

Pat Pope (CEO / Co-Founder)
  – Coined term “Illusion of Inclusion”
  – Developed EDGEAdvantage, Diversity Relationship Indicator™, and Team Inclusion Profile™ (TIP)
  – 2011 “Diversity Legend” of The International Society of Diversity & Inclusion Professionals

Samir Gupte (Consultant)
  – Prior leadership roles in HR and Operations with 7 firms
  – Extensive advisory and service work in academia
  – Significant community involvement aiding disadvantaged communities
Pope Activities

• Initial all-day training session for faculty, staff, and SLC students across all four campuses

• Monthly coaching sessions with leadership
  - Continued August 2019-March 2020

• Join-Up Conversations Pilot
  - Trial program for onboarding new faculty
  - Jumpstarts candid conversations with new hires and senior faculty about similarities, differences, and expectations

• Inclusive Leadership Pilot Session
  - Trial run of web-based inclusive leadership development workshop
External Evaluator

• Performed external evaluation of CURENT culture/climate
  – Quantitative/qualitative survey design
• Assessment continuing to gather wider participation
• Survey Design:
  – 54 quantitative questions for all members
  – 5-8 questions for each position (staff, faculty, student)
  – Categories:
    1. Belonging
    2. Culture of Inclusion
    3. Respect
    4. CURENT Participation
    5. Identity
    6. Diversity & Inclusion
    7. Mindset
    8. General Wellbeing
    9. COVID Impact
  – One open-response per category
• Full report contains ~100 slides of analysis
# External Evaluator: Aggregate Results

<table>
<thead>
<tr>
<th>Y7</th>
<th>Y8</th>
<th>Y9</th>
<th>Dimension</th>
<th>Takeaway</th>
<th>Survey Section(s)</th>
<th># Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.15</td>
<td>4.09</td>
<td>4</td>
<td>Perceived Growth</td>
<td>Respondents feel positively about their advancement potential and career progression</td>
<td>Diversity &amp; Inclusion</td>
<td>10</td>
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<tr>
<td>--</td>
<td>3.76</td>
<td>3.67* / 4.07</td>
<td>Growth Mindset</td>
<td>Respondents believe that hard work can influence ability and that they have experienced growth through their CURENT experiences</td>
<td>Mindset section</td>
<td>1* / 3</td>
</tr>
<tr>
<td>3.93</td>
<td>4.02*</td>
<td>4</td>
<td>Belonging</td>
<td>Respondents experience a high sense of belonging and respect within CURENT</td>
<td>Belonging Respect</td>
<td>18* / 16</td>
</tr>
<tr>
<td>3.97</td>
<td>3.92</td>
<td>4.02</td>
<td>Stereotype Threat</td>
<td>Respondents generally believe that others will not judge them based on their performance or specific demographics</td>
<td>Identity</td>
<td>3</td>
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<tr>
<td>--</td>
<td>3.81</td>
<td>3.75</td>
<td>Event Engagement</td>
<td>Respondents generally have good participation in CURENT events; they believe that events are high value</td>
<td>Participation</td>
<td>2</td>
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<tr>
<td>3.01</td>
<td>3.76</td>
<td>3.77</td>
<td>Stress</td>
<td>Respondents experience varying levels of stress level</td>
<td>General Well-Being</td>
<td>4</td>
</tr>
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</table>

All responses coded so that 5/5 is an optimal response

*Reliability Estimates

**Growth Mindset** (1 item)

None of the original 3 items were correlated above the minimum threshold of .3, therefore, only 1 item was chosen to represent this dimension based on the most relevant conceptualization of growth mindset: You have a certain amount of intelligence, and you can’t really do much to change it.

**Belonging** (14 items; \( \alpha = .910 \))

Two items were withheld from the Belonging dimension due to low interitem correlations. These items were: Other people understand more than I do about what is going on at CURENT; and Others received credit for something you did/suggest?

* all others \( \alpha > .7 \)
## Disaggregation Results

<table>
<thead>
<tr>
<th>English Native</th>
<th>Role</th>
<th>How long in been in CURENT</th>
<th>Education</th>
<th>Working with CURENT</th>
<th>Race</th>
<th>Age</th>
<th>Gender</th>
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<tr>
<td><strong>Stereotype Threat</strong></td>
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<td>PNTA &lt; Native/Nonnative</td>
<td>Students &lt; Staff</td>
<td>3-4 years &lt; 1-2 years</td>
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<td>--</td>
<td>Black &lt; White</td>
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<td>--</td>
<td>Students &lt; Faculty</td>
<td>3-4 years &lt; 5+ years</td>
<td>--</td>
<td>4-6 years &lt; 7+ years</td>
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<td>18-24 years &lt; 45-65+</td>
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<td>--</td>
<td>Staff &lt; Faculty</td>
<td>1 year &lt; 5+ years</td>
<td>Undergraduate &lt; Graduate</td>
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<td>Non-native &amp; PNTA &lt; Native</td>
<td>Students &lt; Faculty</td>
<td>1-2 years &lt; 1 year</td>
<td>--</td>
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<td>Asian &lt; White/Black</td>
<td>25-35 years &lt; PNTA</td>
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<td><strong>Perceived Growth</strong></td>
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General Results Overview (2019)

- Total group responses largely positive
  - Select questions lean more neutral
General Results Overview (2019)

- Total group responses largely positive
  - Select questions lean more neutral

Other people understand more than I do about what is going on at CURENT

How frequently have you felt:
- Acknowledged for something you did/suggested
- Praised in Public
- Praised in Private

You have a certain amount of intelligence, and you can't really do much to change it.
General Results Overview (2020)

- **Year-to-Year Comparison**
  - Trends largely similar
  - Largest growth areas remain
General Results Overview (2020)

- Year-to-Year Comparison
  - Trends largely similar
  - Largest growth areas remain
General Results Overview (2020)

- Year-to-Year Comparison
  - Trends largely similar
  - Largest growth areas remain

**Largest negative Y2Y deviation:**
- I feel comfortable at CURENT
- How often do you participate in events (trainings, lectures, meetings, etc.) hosted by CURENT?

**Largest positive Y2Y deviation:**
- How would you rate the value of the events hosted by CURENT?
Executive Summary

Commitment to diversity & inclusion serves as the basis for CURENT’s mission, vision, and core values

- CURENT aims to achieve an inclusive culture that encourages all students, staff, and faculty to feel valued for their diverse backgrounds, appreciated for their unique qualities, and empowered to achieve their personal goals. CURENT strives to ensure that everyone working within the Center attains a sense of dignity, belonging, fairness, pride, and purposefulness.
- To ensure that its vision is being lived, in Fall 2019, CURENT fielded a survey to 106 stakeholders and conducted 46 stakeholder interviews in order to better understand the stakeholder experience; determine progress being made; and identify opportunities for improvement. In 2020 a follow up survey was fielded with 97 stakeholders to identify changes and track progress on efforts.

Findings indicate that CURENT excels in areas of inclusivity, support, belonging, and respect

- High levels of support & clear expectations: Survey respondents report high rates of perceived growth, likely due to the growth mindset of the majority, quality of available support, and clarity around expectations.
- Sense of belonging: Stakeholders, including 94% of survey respondents, possess a strong sense of belonging; 84% of respondents believe they can be their authentic selves.
- Sense of respect: Respect is freely shared with CURENT stakeholders across all demographic groups feeling respected; 71% say that they feel comfortable voicing contrary opinions.
- Positive & inclusive environment: CURENT demonstrates strong performance in being a positive and inclusive environment, demonstrated by overarching similarities in responses across demographic groups.

CURENT can explore opportunities to increase stakeholder alignment, collaborate across campuses, and improve use of online tools

- Increased alignment & communication: Feedback suggests that more can be done to align in D&I and to create opportunities for discussion and learning related to D&I and CURENT events/news; there is some indication that stakeholders want to have more discussion on funding channels.
- More cross-campus collaboration: Stakeholders, including 29% of faculty/staff interviewees and 25% of student interviewees, desire more opportunities for cross-campus collaboration.
- Improved use of Slack & OfficeVibe: The majority of stakeholders use Slack and OfficeVibe, with 65% of survey takers finding the latter useful; however, several respondents noted that results are not shared, discussed, or acted upon.
Ongoing and Future Actions

Ongoing and continuing

• Continue to provide multiple avenues for feedback and reporting through anonymous and local communication tools
• Empower leaders with tools to have necessary conversations and train faculty on effective use of tools and increase participation in these efforts
• Intentionally demonstrate follow-up on anonymous comments and reports
• Improve clarity of online resources for reporting and seeking help
• Continue improving communications and cross-campus connectivity and community
• Continue expanding social support initiatives during pandemic social isolation
• Institutionalize Center efforts in host universities and colleges for continuation of efforts post-graduation
• Finalize post-graduation career plans for staff
Participation in Campus Initiatives and Awards

- TCE Antiracism and Allyship Taskforce (Member)
- TCE WomEngineers Leadership Council (Executive Committee Member)
- TCE Diversity Action Planning Committee (Chair x2, Members x 7)
- UTK STRIDE Training (Committee Member, Training Facilitator)
- UTK GEM GRAD LAB (Keynote Speaker, 2019)
- UTK Commission for Women, Equity Issues Subcommittee (co-Chair)
- UTK Council for Diversity and Interculturalism (Member)
- UTK Intercultural Development Inventory (QA)
- UT Iinclusive Leadership Academy (Member)
- IAspire (Fellow)

- UTK IChange institutional team (Member)
- Dr. Skutnik, CURENT education coordinator, began transition to position in TCE Training
  - UTK Pride Center, Safe Zone Training (participant x5)
  - NEU Preventing Harassment and Discrimination (participant)

Awards
- TCE Outstanding Service to the College
- TCE Outstanding Service: Outreach and Engagement
- TCE Outstanding Service: Commitment to Inclusive Community
Acknowledgements

This work was supported primarily by the ERC Program of the National Science Foundation and DOE under NSF Award Number EEC-1041877 and the CURENT Industry Partnership Program.

Other US government and industrial sponsors of CURENT research are also gratefully acknowledged.

All students, faculty, and staff share credit in all CURENT successes