

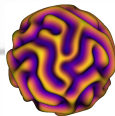
# Equity-minded teaching

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## Learning objectives

You will be able to...

- Define *equity-minded teaching* in your words
- Recognize equity gaps in STEM/BSoE courses
- Develop your equity mindset
- Respond to common inequitable views on teaching
- Understand UCSC's status/role as an HSI (and what that means)
- Describe the relation between teaching environments and equity



## Teaching all of your students

- Most educators want to teach all of their students
- Teaching all students the same way is **not** equally effective for all of them



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## Equal teaching vs. equitable teaching

- Strive for successful outcomes, not for identical experiences
- Recognize that different students will learn in different ways
- Embrace differences and provide many means for engagement



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- Embrace differences and provide many means for engagement

Engaged students are better learners, and students who belong are more likely to be engaged.



## Five fundamentals of antiracist teaching

### 1. Reflection

- Assess personal (implicit) biases
- Be aware of the history of exclusionary practices in higher-ed

### 2. Curriculum

### 3. Climate

- Curate a learning environment that welcomes all students
- Give students equal access to learning, not equal access to materials

### 4. Inclusion

- Adopt practices and policies that serve all of your students, and strive to bring them together

### 5. Equity

- Emphasize successful outcomes, and strive to help all succeed



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- Emphasize successful outcomes, and strive to help all succeed

Ultimately, equitable teaching tackles racial inequities from institutional and systemic levels, down through individual classroom experiences.



Consider a couple common statements



# Case study: Students are the problem

This statement comes from the CITL GPF course



## Statement

If students aren't willing to dedicate the needed time to study, then they should switch out and find another class to take. Some just aren't ready for the rigor of this class, and that's okay.

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## Response

- Where are you likely to hear this said?
- What inequities are present here?
- Is it okay that some aren't ready for the class?
- How could you respond to this? Could you get this person to analyze why they think this is the case?

# Case study: Race doesn't matter

This statement comes from the CITL GPF course



## Statement

I don't think we should be talking about student success and outcomes in relation to race. I care about and teach all students, and I think it is just too divisive to focus on race.

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## Statement

I don't think we should be talking about student success and outcomes in relation to race. I care about and teach all students, and I think it is just too divisive to focus on race.

## Response

- Is ignoring race a good idea?
- Does this seem like a common view in STEM?
- Does this statement actually promote inclusivity? Why or why not?
- How could you respond to this?



## Department of energy classification

The DoE classifies any institution with more than 25% of its enrolled students identifying as latinx as a *Hispanic Serving Institution* (HSI). This opens up many finding opportunities.



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## UCSC status and programs

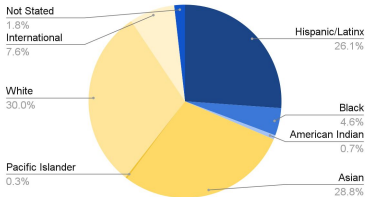
- UCSC is an HSI
- 5 grants awarded to us so far
  - MAPA program: Pre-college writing course
  - SEMILLA: Re-design of precalculus courses for improved equity
  - GANAS: Career and graduate advising



## Equity-Minded University Cultures: Serving at an HSI

Hispanic Serving Institution (HSI) is a designation from the [U.S. Department of Education](#) (DOE) for non-profit degree-granting institutions that **enroll at least 25% Latinx undergraduate students**.

UCSC Fall 2020 Undergraduate Demographics



The designation, in its **explicit recognition of race/ethnicity**, and more importantly, in its choice to use the word **servicing, rather than enrolling**, can be considered a form of equity-mindedness in action.

Applying for the official DOE designation involves an **institutional commitment to serve Hispanic students**, “to take responsibility for the success of historically underserved and minoritized student groups” (McNair, Bensimon, Malcom-Piqueux).

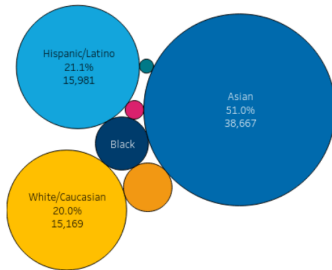
# BSoE Demographics: Applicants

From IRAPS



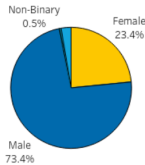
## Ethnicity

- African American/Black
- American Indian/Alaskan Native
- Asian
- Hispanic/Latino
- Native Hawaiian/Pacific Islander
- Unknown/Not Specified
- White/Caucasian



## Gender

- Female
- Male
- Non-Binary
- Unknown



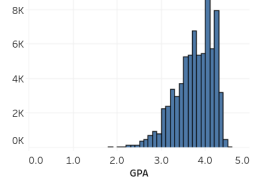
## First Generation

**32.3%**  
**24,498**

## Local Control Funding Formula (LCFF) School

**15.9%**  
**12,062**

## High School Weighted GPA



## Continuing Gen / Unknown

**67.7%**  
**51,339**

## Non-Local Control Funding Formula (Non-LCFF) School

**84.1%**  
**63,775**



# BSoE Demographics: Enrollees

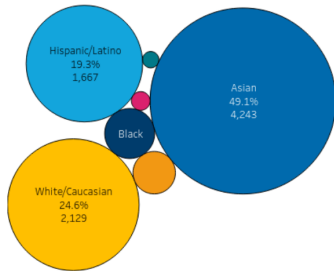
From IRAPS



## Ethnicity

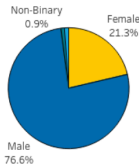
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- Female
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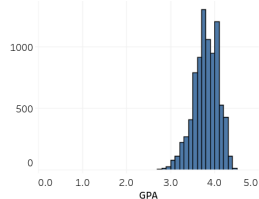
## First Generation

**31.0%**  
**2,679**

## Local Control Funding Formula (LCFF) School

**13.1%**  
**1,128**

## High School Weighted GPA



## Continuing Gen / Unknown

**69.0%**  
**5,964**

## Non-Local Control Funding Formula (Non-LCFF) School

**86.9%**  
**7,515**

# BSoE Retention vs Humanities

From IRAPS



Admission Division	Admission Major/Department/Division	Admit Years	Demographic	In Proposed Division		In Another Division		Did not graduate		Grand Total	
				Student Count	Percent	Student Count	Percent	Student Count	Percent	Student Count	Percent
Humanities	Humanities	All	African-American/Black	18	60.0%	<10	<10	<10	<10	30	100.0%
			American Indian/Alaska ..	<10	<10	<10	<10	<10	<10	10	100.0%
			Asian	64	41.3%	49	31.6%	42	27.1%	155	100.0%
			Hispanic/Latino	163	51.7%	75	23.8%	77	24.4%	315	100.0%
			International	<10	<10			<10	<10	<10	<10
			Native Hawaiian/Oth Pac..	<10	<10	<10	<10			<10	<10
			Unknown/Not Specified	<10	<10	<10	<10	<10	<10	<10	<10
			White/Caucasian	223	57.8%	88	22.8%	75	19.4%	386	100.0%
<b>Total</b>				<b>479</b>	<b>52.5%</b>	<b>221</b>	<b>24.2%</b>	<b>213</b>	<b>23.3%</b>	<b>913</b>	<b>100.0%</b>
Baskin School of Engineering	Baskin School of Engineering	All	African-American/Black	36	40.4%	24	27.0%	29	32.6%	89	100.0%
			American Indian/Alaska ..	<10	<10	<10	<10	<10	<10	22	100.0%
			Asian	634	57.8%	237	21.6%	225	20.5%	1,096	100.0%
			Hispanic/Latino	198	29.1%	250	36.7%	233	34.2%	681	100.0%
			International	70	56.9%	20	16.3%	33	26.8%	123	100.0%
			Native Hawaiian/Oth Pac..	<10	<10	<10	<10	<10	<10	19	100.0%
			Unknown/Not Specified	32	71.1%	<10	<10	<10	<10	45	100.0%
			White/Caucasian	442	54.7%	186	23.0%	180	22.3%	808	100.0%
<b>Total</b>				<b>1,427</b>	<b>49.5%</b>	<b>736</b>	<b>25.5%</b>	<b>720</b>	<b>25.0%</b>	<b>2,883</b>	<b>100.0%</b>

# BSoE Retention vs PBCSci

From IRAPS



Admission Division	Admission Major/Department/Division	Admit Years	Demographic	In Proposed Division		In Another Division		Did not graduate		Grand Total	
				Student Count	Percent	Student Count	Percent	Student Count	Percent	Student Count	Percent
Baskin School of Engineering	Baskin School of Engineering	All	African-American/Black	36	40.4%	24	27.0%	29	32.6%	89	100.0%
			American Indian/Alaska ..	<10	<10	<10	<10	<10	<10	22	100.0%
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Physical and Biological Sciences	Physical and Biological Sciences	All	African-American/Black	81	36.0%	77	34.2%	67	29.8%	225	100.0%
			American Indian/Alaska ..	13	32.5%	14	35.0%	13	32.5%	40	100.0%
			Asian	794	53.5%	424	28.6%	266	17.9%	1,484	100.0%
			Hispanic/Latino	579	38.2%	515	34.0%	422	27.8%	1,516	100.0%
			International	33	37.9%	28	32.2%	26	29.9%	87	100.0%
			Native Hawaiian/Oth Pac..	<10	<10	<10	<10	11	37.9%	29	100.0%
			Unknown/Not Specified	34	51.5%	22	33.3%	10	15.2%	66	100.0%
			White/Caucasian	775	53.0%	351	24.0%	337	23.0%	1,463	100.0%
<b>Total</b>	<b>2,318</b>	<b>47.2%</b>	<b>1,440</b>	<b>29.3%</b>	<b>1,152</b>	<b>23.5%</b>	<b>4,910</b>	<b>100.0%</b>			



## Create a welcoming environment

- Students need to feel that they belong before anything else
- Be very explicit about course expectations and processes
- Set high, but achievable, expectations
- And! Express your belief that your students can achieve them



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- Allow students to participate in the course in different ways
- Use a variety of teaching techniques



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- Use a variety of teaching techniques

## Give your students ownership of their learning

- Drive engagement by letting students have a say in how they learn
- Gather feedback from students semi-regularly, and act on it



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- First generation student reflections
- You never become fully independent
- Growth messages increase help-seeking and performance for women in STEM
- The college math academy as an intervention into math education



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## Jigsaw discussion

1. Grab a response sheet
2. Form groups of 3 or 4
3. Try to group with people who read something different
4. Provide an overview of what you read, and what is interesting about it





## Learning objectives

You should be able to...

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- `https://citl.ucsc.edu/resources/equity-minded-teaching/`
- `https://citl.ucsc.edu/resources/equity-minded-teaching/antiracist-teaching/`
- `https://poorvucenter.yale.edu/InclusiveTeachingStrategies`
- `https://citl.ucsc.edu/resources/equity-minded-teaching/udl/`