If It Feels Normal, It’s Not Equity: Assessment for Racial Equity

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morrisspatrick@foothill.edu
Where are you? Who was there before?

The land where I am is part of the original ancestral homelands of the Muwekma Ohlone.

We pay respect to the Muwekma Ohlone peoples – past, present, and future – and their continuing presence in the homeland and throughout their historical diaspora.
The thing I'm most expert in is not being an expert.

Myles Horton
Race
Gender
Age
Appearance
Size/Weight
Class
Ability
Language
Education
Sexuality / Orientation
Religion
Marriage & Family
Citizenship Status
White Male Senior
Native Speaker of English Advanced Degree Cis-Gendered Straight
Height/Weight Proportional Upper Middle Class Temporarily Abled
Native-Born U.S. Citizen
Atheist Raised Catholic Divorced No Children
Academic Field: Math
Tenure Status: Tenured
What we see depends heavily on what our culture has trained us to look for.

Nell Irvin Painter
Princeton University
The History of White People (2010)
"No problem can be solved from the same level of consciousness that created it."

~ Albert Einstein
I believe

- **Normal** assessment policies perpetuate racist educational outcomes.

- **Assessment for racial equity** can interrupt this systemic racism in education.
Racial Inequity in Education
Foothill College STEM Math Sequence
Failure Rates by Population 2012-2017

<table>
<thead>
<tr>
<th>Subject</th>
<th>N(100s)</th>
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<tbody>
<tr>
<td>Alg1</td>
<td>33</td>
</tr>
<tr>
<td>Alg2</td>
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<tr>
<td>PreC1</td>
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<td>DiffEq</td>
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<td>LinAlg</td>
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Foothill College STEM Math Sequence
Presence by Population 2012-17

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</table>
We need to let go of the myth that our schools are failing our Black and Brown students. They're not. Our schools are succeeding with our Black and Brown students. They're doing exactly what we designed them to do.

Tim Wise
The "equity gap"
Racial Inequity in Education

Quantitative Assessment Policies
<table>
<thead>
<tr>
<th>Total</th>
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<tbody>
<tr>
<td>71.35%</td>
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<td>87.57%</td>
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<td>90.15%</td>
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<td>93.83%</td>
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<td>99.47%</td>
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</table>
Learning is a psychological event with neurophysiological effects that takes place in a socio-cultural environment with historical context.
Racial Inequity in Education

Quantitative Assessment Policies

Myth of Objectivity  Culture of Skepticism
A Selective Timeline of the Eugenics Movement

- 1877  Reconstruction ends, racial segregation begins
- 1883  Francis Galton: “Inquiries into Human Faculty and Development”
- 1896  Plessy v. Ferguson: "Separate but equal"
- 1902  David Starr Jordan: “Blood of a Nation”
- 1907  First U.S. state law: Involuntary sterilization of the “unfit”
- 1909  Karl Pearson: “Groundwork of Eugenics”
- 1912  Ronald Fisher stewards first International Eugenics Conference
- 1915  D.W. Griffith: “Birth of a Nation”
- 1916  Height of the lynching era; beginnings of the great migration
- 1916  Lewis Terman: “Study of American Intelligence”
- 1923  Carl Brigham: “Measurement of Intelligence”
- 1925  Mein Kampf
- 1926  Brigham's further work
- 1927  Buck v. Bell: "Three generations of imbeciles are enough."
- 1934  Nazis model German race laws on Jim Crow
- 1946  Nuremberg defendants quote American laws
Myth of Objectivity

Terman & Brigham
Lewis Terman
Stanford University
A Study of American Intelligence (1916)
President, American Psychological Association (1923)

Carl Brigham
Princeton University
The Measurement of Intelligence (1923)
The army mental tests had proven beyond any scientific doubt that, like the American Negroes, the Italians and the Jews were genetically ineducable.

It would be a waste of good money even to attempt to try to give these born morons and imbeciles a good Anglo-Saxon education, let alone admit them into our fine medical, law, and engineering graduate schools.

Carl Brigham

*The Measurement of Intelligence* (1923)
In 1926, Carl Brigham wrote the SAT.
'Objectivity' is nothing more than collective subjectivity. It is impossible to be objective.

Molefi Kete Asante
Temple University
Afrocentricity (1980)
We do not – CANNOT – make decisions by objectively considering data.

Daniel Kahneman
Cognitive Scientist
Nobel Laureate in Economics
Thinking Fast and Slow (2011)
The use of standardized tests to measure aptitude and intelligence is one of the most effective racist policies ever devised to degrade Black minds and legally exclude Black bodies.

Ibram X. Kendi
Boston University
How to be an Antiracist (2019)
Culture of Skepticism

Fisher & Pearson
Ronald Fisher
as a Steward at the
First International Eugenics Conference
1912

Later Sir Ronald Fisher, FRS

Karl Pearson, FRS
University College – London
1912
The Groundwork of Eugenics

by

Karl Pearson, F.R.S.

"You ask whether I shall discuss 'man.' I think I shall avoid the subject, as so surrounded with prejudices; though I fully admit it is the highest and most interesting problem for the naturalist."—Letter of Darwin to Wallace, 1857

London
Published by Dulau and Co.
37 Soho Square, W.
1909
Price One Shilling
Fisher & Pearson on decision-making...

• Data speak for themselves

• It's **much worse to believe** something that's not true **than to not believe** something that is true

• Type I errors are **much worse than** Type II errors

• Do not accept evidence supporting a claim unless, based on this experiment **considered in isolation**, the odds in its favor are at least 19 to 1

• $p < 0.05$
Question facing instructor: Is this student qualified?

<table>
<thead>
<tr>
<th>Instructor's Decision</th>
<th>Is the student truly qualified?</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES, they are</td>
<td>✅</td>
</tr>
<tr>
<td>NO, they're not</td>
<td>❌</td>
</tr>
</tbody>
</table>

- What are the consequences of each type of error?
- Which error is worse, in your view?
<table>
<thead>
<tr>
<th>Instructor's decision about whether the student is qualified</th>
<th>Is the student truly qualified?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>YES</td>
</tr>
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<td>✅</td>
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<tr>
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<td>❌</td>
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**YES ✅** Instructor correctly passes a qualified student.

**YES ❌** Instructor made a Type I error.
Unqualified student passes the class.

**NO ❌** Instructor made a Type II error.
Qualified student fails the class.

**NO ✅** Instructor correctly fails an unqualified student.
Data do not speak for themselves; they are given voice by those who interpret them.

Hood, Hopson, and Kirkhart, 2015, p. 296
We must decolonize our minds.

bell hooks
<table>
<thead>
<tr>
<th>Teacher's Decision</th>
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<tr>
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<td>Yes</td>
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<tr>
<td>Yes</td>
<td>✓</td>
</tr>
<tr>
<td>No</td>
<td>Type II Error</td>
</tr>
<tr>
<td>Yes</td>
<td>Type I Error</td>
</tr>
<tr>
<td>No</td>
<td>✓</td>
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Myth of Objectivity

Culture of Skepticism
Foothill College - Patrick Morriss
Failure Rates by Population 2014-2018

<table>
<thead>
<tr>
<th>Course</th>
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<th>Rate</th>
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<td>Stats</td>
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<td>LibArts</td>
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<td>DiffEq</td>
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</table>
Foothill College Math 10 Elementary Statistics
Failure Rates by Student Population, 2015-2019
I get it.
I'm on board.
What do I do now?
COURAGEOUS CONVERSATION COMPASS

BELIEVING

THINKING

FEELING

ACTING
COURAGEOUS CONVERSATION COMPASS

BELIEVING

THINKING

FEELING

ACTING
COURAGEOUS CONVERSATION COMPASS

BELIEVING

FEELING

THINKING

ACTING
The way is shut.
COURAGEOUS CONVERSATION COMPASS

BELIEVING

FEELING

THINKING

ACTING
It's the beliefs that must shift in order for outcomes to change. When policies change in advance of beliefs, we are often surprised that the problem is still with us.

Heather McGhee
The Sum of Us (2021)
COURAGEOUS CONVERSATION COMPASS

BELIEVING

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COURAGEOUS CONVERSATION COMPASS

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<td>Susan Blum</td>
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<td>Highlander Folk School</td>
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<td>Why Race and Culture Matter in Schools</td>
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<td>Asset-Framing</td>
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<td>Authentic Assessment</td>
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<td>Tara Yosso</td>
<td>Cultural Capital</td>
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2021 Assessment Institute
October 24-27
https://assessmentinstitute.iupui.edu/
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Patrick Morriss, Math Department, Foothill College, Los Altos Hills, California USA
How do grades work?

No points & no percentages. Just a dozen or so B tasks and two or three A tasks.

What's a B task?

B tasks are problems for collaboration during our virtual sessions. I'll put you & your group in a Zoom breakout room to work on them together. Submit your responses through the Discussions tab in Canvas.

We can work together?

Yes. Learning is a social activity. Actually, it's a psychological event, but it occurs in a social context. Consult with others, construct your own understanding, submit your own work, and give credit to the people who helped you by citing the people and resources you found helpful. That's academic integrity.

What's an A task?

A tasks are more involved than B tasks. They require a lot more work (outside of our virtual meeting time), and require in-depth analysis and connections between topics. They're opportunities for you to show that you really know what you're doing.

So how do I get, say, a B?

Show up to the virtual sessions & do the B tasks with us.

That's it?

That's it.

What if I only want a C?

Why would you want that? You can get a B. Just do the B tasks.

OK. How do I get an A?

Do the B tasks and the A tasks.

The A tasks sound hard.

Yes. That's why you'll get an A. But they're totally doable, especially with a good group.
We can do A tasks in groups?

Yes. See "We can work together?"

How do I find a good group?

Ay, there's the rub. Surround yourself with excellent people. Sooner or later, you'll be mistaken for one. Trust me, I've been doing that my whole life.

How do you grade the tasks?

I use these symbols, like in the diagram:
+ means "complete"
* means "exemplary"
# means "not yet complete"
? means "no work submitted"
# and ? are temporary marks; they last about two weeks.

What's "not yet" mean?

It means you haven't (yet) completed that task. When you complete the task, I change the # to a +. 😊 If you totally kill it, I can even change the # to a *. 😎 If you don't complete the task within about two weeks, and you don't let me know you're still working on it, I change the # to a ~, which means "thank you for trying." 😞 Time to focus on more recent work.

What if I miss a B Task & get a "?"?

Like a #, a ? is temporary & lasts about two weeks. When you complete the task, I change the ? to a + 😊 We're good. If you submit some work that still doesn't measure up, I'll change the ? to a ~ 😞 Thank you for trying. If you don't submit any work in that time, and you don't let me know you're still working on it, I change the ? to a - 😞 which means "let it go." The learning value of all tasks expires eventually; at some point they're not worth doing anymore. Focus on more recent work. Here's how the temporary grades work:
Can I get an A if I get * marks on all the B tasks?

No. Those are B tasks. See "How do I get an A?" But earning several * marks on B tasks sounds a lot like a B+, doesn't it? I think it does...

What if I do all the B tasks and try the A tasks but can't really complete them?

I dunno. If you give them a good try, seems like a B+ at least would be fair, doesn't it? Did you do some work that was really good, just not all of it? Maybe an A-? Seems like it kinda depends on the quality of what you do. What do you think? What feels right?

What if I don't or can't complete all the B tasks?

There are other grades available (B-, C+, C, D, & F) depending on how many and which tasks you don't complete. COVID is real & it's not the only challenge out there.

Got that right. Can I still get a B if I get some ~ marks on the B tasks?

Seems like it should depend on how many ~ marks you get, and which tasks you get them on. A single ~ mark doesn't seem too meaningful to me. More than that means there's some work you didn't complete, so it doesn't feel like anything higher than a B- would be right, does it? What do you think?

What if I get some - marks?

To get a - mark means you didn't hand in any work for a task when it was due or at any time in the two weeks after. No shame in not handing it in on the due date, that happens sometimes. That's why I leave tasks open for a while, to give you a chance to recover from a setback. If you don't or can't recover within a couple weeks, then it's time to let that one go and focus on more recent work. But if you're letting stuff go, I'll notice & be in touch to see what you need, maybe connect you with my network. Foothill's got lots of good people who want you to succeed as much as you do.

Is there extra credit?

Nope.

Got it. What about midterms?

Just say no to midterms. I haven't given a midterm since 2007. They don't reveal anything meaningful about learning. But really? You want a midterm? Fine. I'll write you a midterm...
No, no. That's OK. I'm good with no midterm. What about the final exam?

If you want, I can send you some problems and arrange a ten-minute Zoom conference where you tell me about your work. If you demonstrate that you really know what you're doing, I can use that evidence to support a higher grade. Nothing lower, though.

Anything else?

Yeah. Sometimes people say or do stuff that shows deep understanding and really helps other people learn. I can't predict how or when that might happen, but when I see it, I record a +1😊. At the end, I can use +1😊s to justify a higher grade.

Isn't that like extra credit?

You really want extra credit, don't you? I can't assign any task for a +1😊, I just try to catch it when it happens. How about this? I'll also record +1😊 every time someone gives you credit for helping them. (See "We can work together?") Can we go with that?

Sure. So can I give +1😊s to other people?

Yep. Every task ends with this integrity practice: "Please cite any people or sources you found helpful." When you cite a helpful classmate, I'll record a +1😊 for them.

Cool! Can I give a +1😊 to myself?

Really? Did you just ask that? No, you can't give a +1😊 to yourself. You get them from other people when you're helpful in a way that works for them. Try that.

I will. Are there -1😊s?

Nah. That'd just be mean. Could you imagine +1😊? Got some people in mind you'd like to give those to? Yeah, let's not do that...

What if I have more questions?

Hang out for student time after class or at my other scheduled times, message me in Canvas, or email me at morrisspatrick<at>foothill<dot>edu. I know, email is pretty 2005. It's what the college gives me. Pretend you're trying to reach your grandfather.