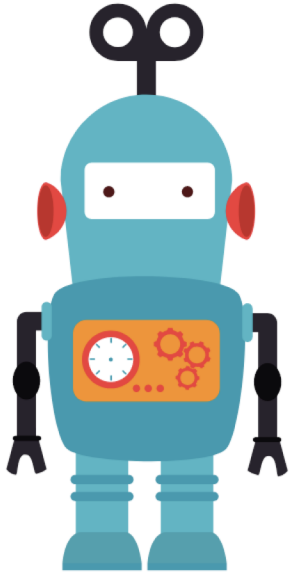

don't be a robot.

#HumanizingSTEM

Humanizing

ONLINE STEM COURSES

Project Team:

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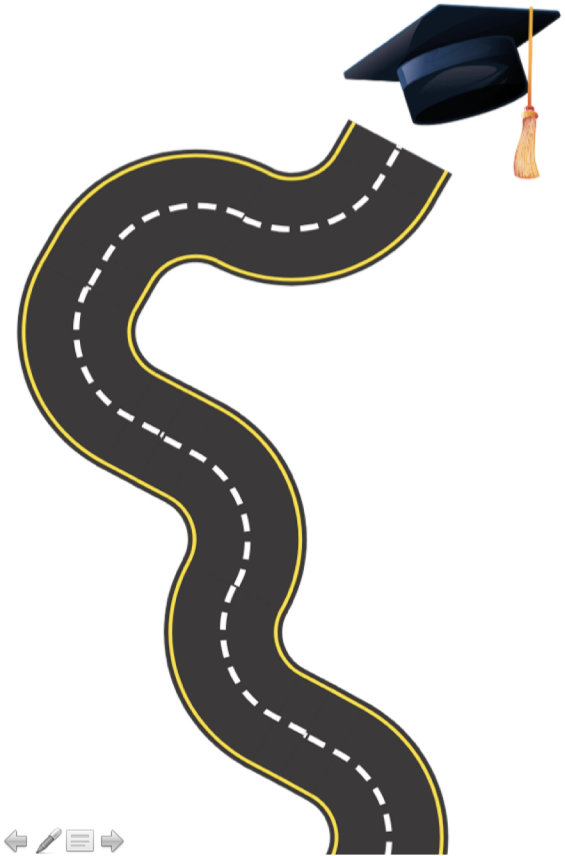
- Mike Smedshammer & Brent Wedge, Modesto Junior College
- Kim Vincent-Layton & Jeffrey White, Humboldt State University
- Di Xu, UC Irvine

The STEM Academic Pathway



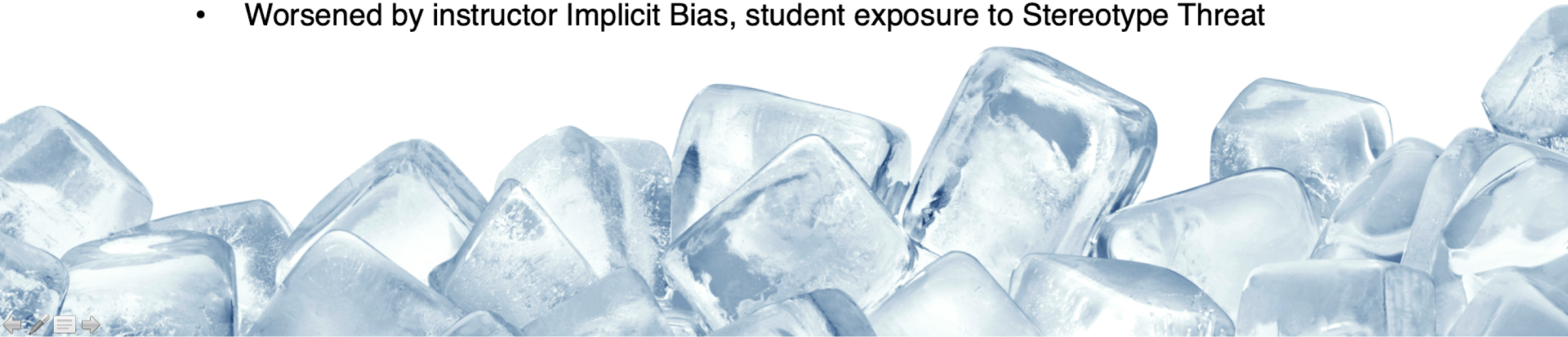
- 14.7% of STEM undergraduates are Black, Latinx, Native American
- Students from minoritized groups (including women) are more likely to leave STEM majors

(Estrada, et al. 2016)

Why do students leave?

- "Chilly" course climate
  - Passive learning (heavy lecture) (Eagan, 2016)
  - Competitive culture (high stakes exams, curve grading)

    (Hughes, Hurtado, & Eagan, 2014)
    - Worsened by instructor Implicit Bias, student exposure to Stereotype Threat



Human connection is the antidote.

Online Courses Matter

- Undergraduates with *blended* course schedules persist at higher rates than those who take all courses F2F or online (James, Swan & Daston, 2015).

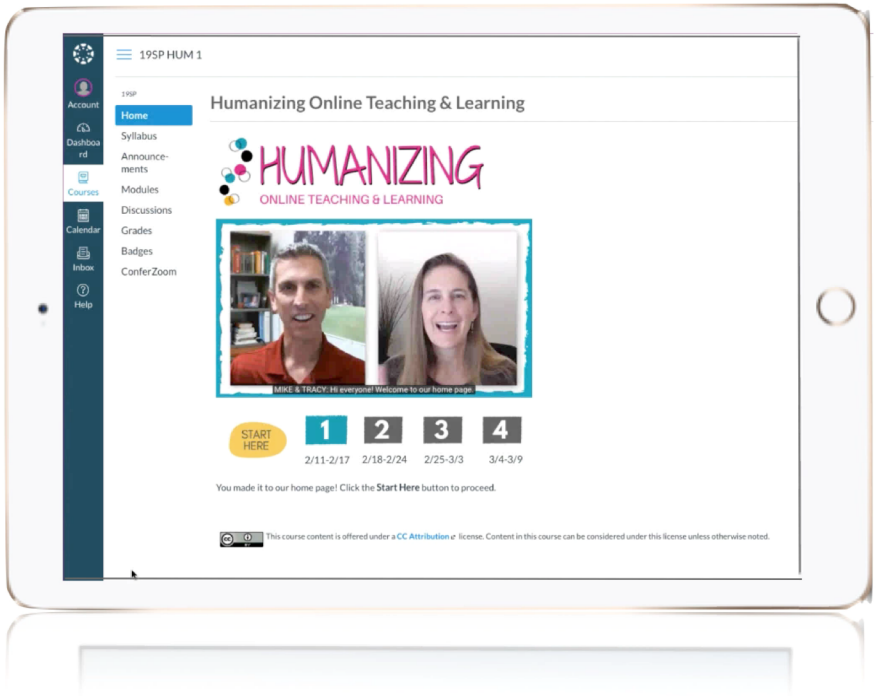
BUT …

- Online students can feel even more isolated.
- Racial and ethnic achievement gaps are exacerbated online.

#1

A LIQUID SYLLABUS

made with Google Sites



#2

A VISUALLY APPEALING & DYNAMIC HOMEPAGE

made with help from Canva

FACULTY DEVELOPMENT

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