Responsive teaching:
What can I do to help all my students succeed?

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Responsive: To *what*?

Diversity

- Ethnic and cultural backgrounds
- Socioeconomic status
- First generation students
- International students
- Career aspirations
- Preparation
Challenges…

Time

Resources

Class sizes

Students!
Solutions...

Easy

Sustainable

Scalable
Responsive teaching

Diverse problems = Diverse solutions!
Idea #1: Values affirmation

**BRIEF** intervention

Beginning of course

What values are important to you?

Overcomes: Stereotype threat
Idea #1: Values affirmation

Closing the Social Class Achievement Gap for First-Generation Students in Undergraduate Biology

Judith M. Harackiewicz, Elizabeth A. Canning, Yoi Tibbetts, Cynthia J. Giffen, Seth S. Blair, Douglas I. Rouse, and Janet S. Hyde
University of Wisconsin-Madison

Reducing the Racial Achievement Gap: A Social-Psychological Intervention

Geoffrey L. Cohen1, Julio Garcia2, Nancy Apte2, Allison Master2
1 Present address: Department of Psychology, Stanford University, Stanford, CA 94305, USA.
2 See all authors and affiliations

Reducing the Gender Achievement Gap in College Science: A Classroom Study of Values Affirmation

Akiro Miyake1, Lauren L. Kost-Smith2, Noah D. Finkelstein2, Steven J. Pottick1, Geoffrey L. Cohen1, Tiff...
1 See all authors and affiliations

Affirmation of Personal Values Buffers Neuroendocrine and Psychological Stress Responses

J. David Creswell,1 William T. Welch,1 Shelley E. Taylor,1 David K. Sherman,1 Tara L. Gruenewald,1 and Traci Mann1
Idea #1: Values affirmation (relevance)

BRIEF intervention

Beginning of class

What is the relevance of [ ] in your life?

Overcomes: Issues with interest/motivation

Journal of Personality and Social Psychology

Closing Achievement Gaps With a Utility-Value Intervention: Disentangling Race and Social Class
Judith M. Harackiewicz, Elizabeth A. Canning, Yoi Tibbetts, Stacy J. Priniski, and Janet S. Hyde
Idea #1: Values VS Relevance affirmation

Can you use **BOTH**?

Is there a stereotype threat?
Idea #1:

Would you implement/use (Already do so)?

Why/not?

How?
Idea #2: Get buy in / Establish context / Relevance

Students motivation $\leftrightarrow$ Perceived usefulness

Convince students: “This is good!”
Idea #2: Establish context/relevance!

The importance of establishing relevance in motivating student learning

David Kember, Amber Ho and Celina Hong

“What's in it for me?”: Increasing content relevance to enhance students' motivation

Ann Bainbridge Frymier & Gary M. Shulman

Pages 40-50 | Published online: 22 May 2009
Idea #2: Get buy in/Establish context/Relevance

Students motivation <-> Perceived usefulness

Convince students: “This is good!”

Means → Depend on outcomes required
Idea #2: Establish context/relevance!

JOURNAL ARTICLE

Different Disciplines Require Different Motivations for Student Success

Rosanna Breen and Roger Lindsay
Research in Higher Education
Vol. 43, No. 6 (Dec., 2002), pp. 693-725

Published by: Springer
Stable URL: http://www.jstor.org/stable/40197280
Page Count: 33
Idea #2: My example

It is very important that you learn about traxoline. Traxoline is a new form of zionter. It is monotilled in Ceristanna. The Ceristannians gristerlate large amounts of fevon and then bracter it to quasel traxoline. Traxoline may well be one of our most lukised snezlaus in the future because of our zionter lescelidge.

What is “Traxoline?”

A. A Drug  
B. A new form of zionter  
C. Aquaselation  
D. A derivative of zyskoffnium
Idea #2: My example

It is very important that you learn about traxoline. Traxoline is a new form of zionter. It is monotilled in Ceristanna. The Ceristannians gristerlate large amounts of fevon and then bracter it to quasel traxoline. Traxoline may well be one of our most lukised snezlaus in the future because of our zionter lescalidge.

Where is Traxoline “monotilled?”

A. Ceristanna
B. Bracter
C. Quasel
D. Zionter
Idea #2: My example

It is very important that you learn about traxoline. Traxoline is a new form of zionter. It is monotilled in Ceristanna. The Ceristannians gristerlate large amounts of fevon and then bracter it to quasel traxoline. Traxoline may well be one of our most lukised snezlaus in the future because of our zionter lescelidge.

How might you improve the yield of Traxoline?

A. Increase the temperature of gristerlation
B. Add acid during gristerlation
C. Heat the fevon prior to bractering
D. Carry out the bractering in plastic instead of glass
Google OR a Doctor: Who \textbf{KNOWS} more?

When you’re sick?

Why?
Idea #2:

Would you implement/use (Already do so)?

Why/not?

How?
Idea #3: Building communities

Increasing use of virtual communities

Have students introduce themselves

“Virtually,” on Discussion board
Idea #3: Building communities

Building Learning Communities in Cyberspace
“Effective strategies for the online classroom”
By Rena Palloff and Keith Pratt

Learning effectiveness in a Web-based virtual learning environment: a learner control perspective
Shih-Wei Chou and Chien-Hung Liu
Version of Record online: 3 FEB 2005
DOI: 10.1111/j.1365-2729.2005.00114.x
Idea #3: Examples of online introductions

Winter 2017 Biochemistry course

Lower division, requirement

Voluntary introduction on Discussion board

103/400 students responded!
And since this was my bright idea, I'll go first!

Hi Everyone,

I'm Dr. Kadandale. If it makes it easier, you can just call me Dr. K. But whatever floats your boat ;-) 

I grew up in India, and moved to the US for my PhD. After getting my PhD, I worked for a little while as a post-doc in UCSD, and then moved to UCI where I was lucky enough to get a faculty position. My passion is teaching, learning how to teach better, learning, science, mentoring and really getting to know undergrads at UCI. To me, science is a way of life, and is the one thing that can really help us become better human beings - so my ultimate goal is to make you all into scientists. Not necessarily the lab-coat wearing, pipette-wielding, microscope-peering kind, but the kind of person who uses scientific principles to live their lives, overcome their biases, and make the world slightly more bearable.

I love the outdoors, and in my free time, I travel, hike, photograph things (many of my students are surprised to learn that all the photographs in my office are mine), play volleyball, drive my wife's car (ask me why sometime!), or ride my motorcycle on some really fun, twisty roads. In between all that, I try surfing, kayaking and anything else that will get me outdoors!

I'm looking forward to getting to know as many of you as I can, and hopefully, I'll see many of you at office hours regularly!
Idea #3: Examples of online introductions

Jennifer Vu

Jan 4, 2017

Hi everyone. My name is Jennifer, and I’m a second year, majoring in Bio Sci with a minor in Public Health. My favorite thing to do when I’m not studying is to watch Korean dramas and to listen to Korean pop songs. My favorite groups are BTS and Blackpink!

Kristine Minh Tran

Jan 4, 2017

Omg!!! Yesss!!! Blackpink is bae!!!
Idea #3: Examples of online introductions

Kane Stilians
Jan 7, 2017

Greetings Earthlings *cough* I mean classmates. I am here to study humans *ahem* biochemistry so that I can understand how this world works and to eventually conquer it...I mean...conquer the class of course.

I'm completely human like the rest of you. *three thumbs up*

Brysen Jared Pasion
Jan 7, 2017

Hi! I'm Brysen, and I'm from Mililani, HI. I've been playing ukulele for a while, and I'm trying to pick up guitar. What I want out of life is to be successful, but I don't know what that looks like yet so I'm focusing on your typical short-term college goals. But right now, I just want to see the other replies. Also, I have a pet dolphin :)
Idea #3: Examples of online introductions

Kristin Alexis Co
Jan 9, 2017

Hi guys, I'm Kristin and I'm a second year bio major, archaeology minor. I'm from the YAY AREAAAAAAA, but I am pretty familiar with Irvine, with both my sisters graduating from here, class of 2002 and 2004. Puppies are rad. I love to paint, play music, dance, and look at dank memes in my past time.

Looking forward to this quarter!
Edited by Kristin Alexis Co on Jan 9 at 10:25am

→ Reply  📠 [1 like]

Rinavien Manzano Odina
Jan 9, 2017

You seem nice! Hope we can share dank memes to each other after class! :-D

→ Reply  📠 (1 like)
Idea #3:

Would you implement/use (Already do so)?

Why/not?

How?
Responsive: To what?

Diversity

- Ethnic and cultural backgrounds
- Socioeconomic status
- First generation students
- International students
- Career aspirations
- Preparation
Solutions…

Small changes $\rightarrow$ Big impacts!

Easy, Sustainable, Scalable