

HOPE IN A TIME OF MONSTERS

Supporting Student and Faculty Mental Health

1

Which of the following images matches best how you feel about the rest of this semester?

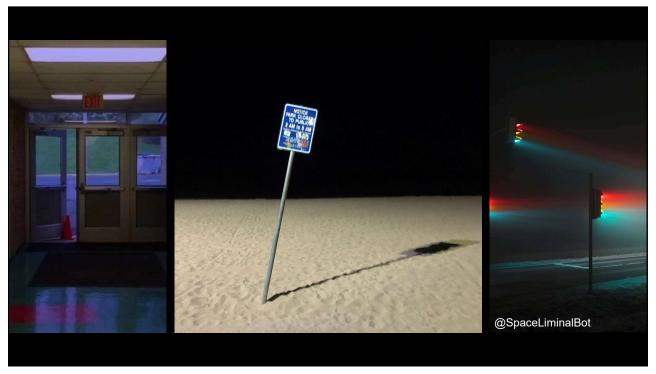




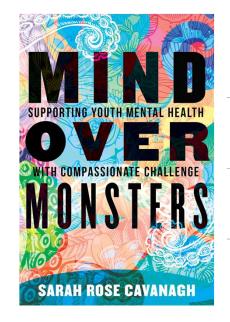














Voices of our students

Science

latest psychological, neuroscientific, educational literature

Solutions

expert interviews with educators, clinicians, psychologists, acting coaches

5

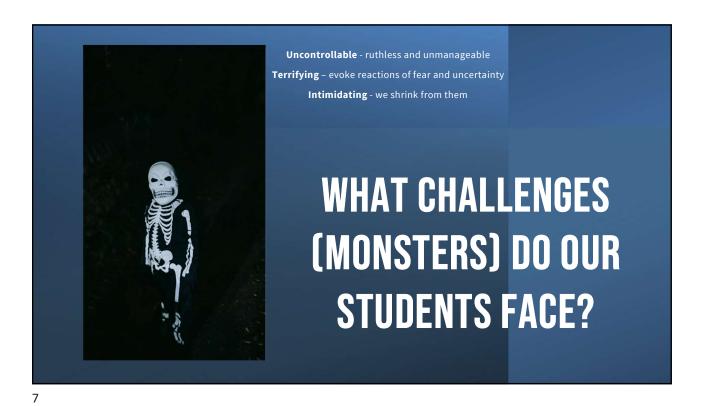
THE PATH AHEAD





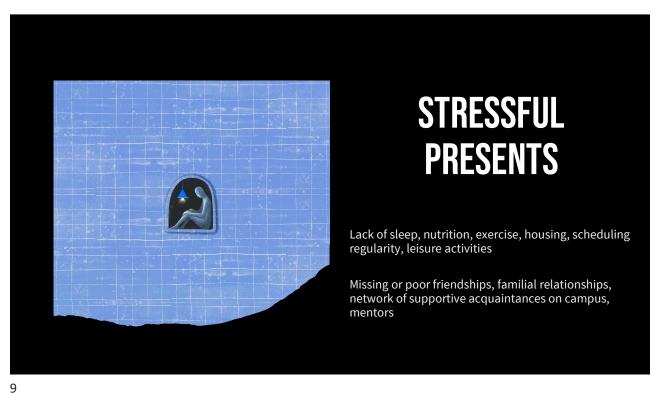


Problems Science Solutions



DIFFIGULT PASTS

Trauma, adverse childhood experiences, discrimination, racism, inequality





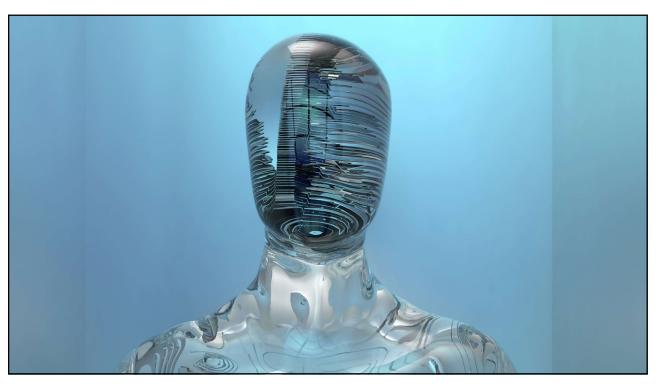




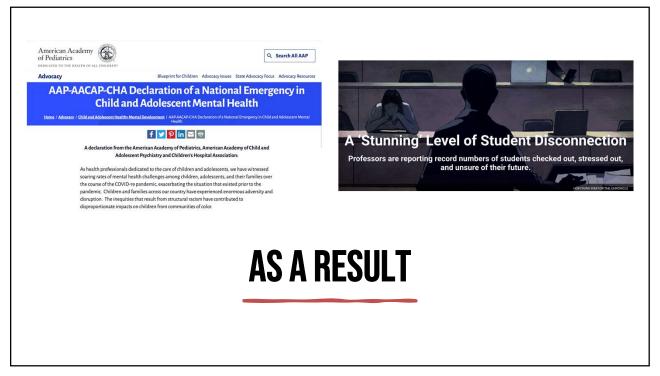












FACULTY



In response to our Twitter thread, people said they were doing what they must, but nothing extra. They said they used to be a "rah-rah team player," but not anymore. They used to feel strong ties to their institution, but they have since felt so undervalued that they're cutting back. One response that especially stood out to us: "Faculty might not be quitting but they're left the building.

Connections to the institution have been frayed. The work is getting done, but there isn't much spark to it.

be quitting, but they've left the building — sometimes departure is a state of mind."

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FACULTY

Your Most Important Resource Is Eyeing the Door

What colleges and universities need now is compassion, but not for the reasons you might think.

By Sarah Rose Cavanagh | JUNE 16, 2021



OFTTV IMAGE

The Staff Are Not OK

It's time higher education started paying attention to the health and well-being of the staff members whose work has pulled campuses through the Covid-19 crisis.

By Lee Skallerup Bessette | OCTOBER 30, 2020



STAFF

GETTY IMAGES

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THE PATH AHEAD





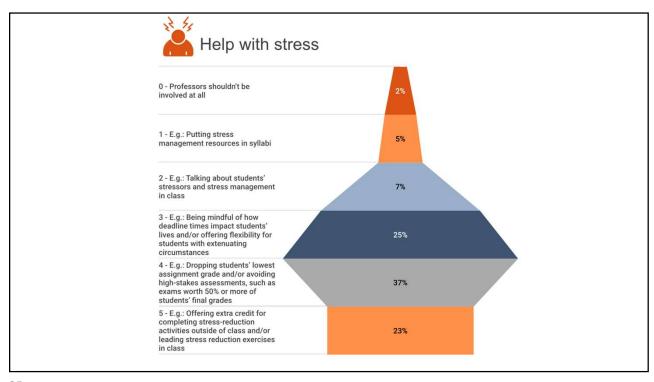


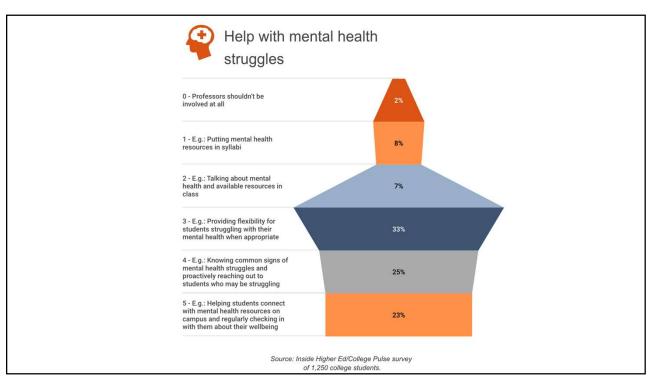
Problems Science Solutions

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WHAT STUDENTS WANT:

HELP WITH THEIR MENTAL HEALTH

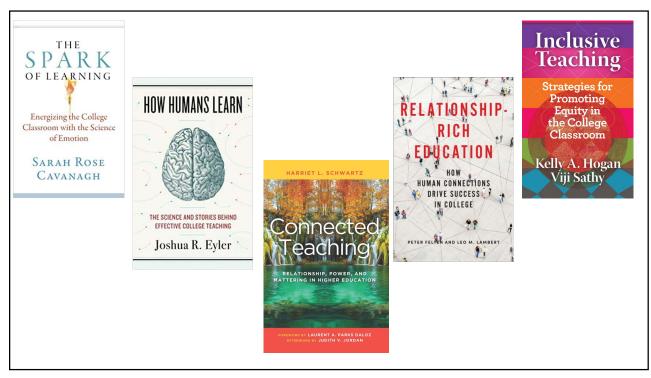




WHAT STUDENTS NEED

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COMPASSIONATE FABRICS & ROUTINES



Drive to Thrive: A Theory of Resilience Following Loss

Wai Kai Hou ™, Brian J. Hall & Stevan E. Hobfoll

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[S]tress resilience is determined by sustaining the fabrics/routines (i.e., interwoven psychosocial and communal activities, procedures, and practices) and structure of everyday life.

Wai Kai Hou, Psychologist

Resilience (1) Break Point (2) (3) Vulnerability (4)

Fig. 2 Four trajectories of daily routines in stress resilience and vulnerability

Note. (1) Well-built preexisting daily routines and structure that are effectively sustained; (2) les

well-built but effectively sustained daily routines; (3) well-built but not effectively sustained daily

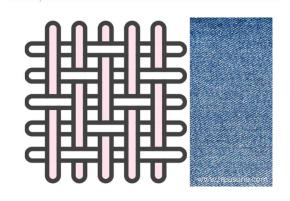
routines; (4) less well-built and not effectively sustained daily routines

Corollary 1: Those who have more "well-built" routines and structure of everyday life will be more resilient to posttraumatic and chronic stress. The "well-built" routines and structure could result from longstanding practices or sustaining routines and structure effectively.

Corollary 2: Those who lack "well-built" routines and structure of everyday life will be less resilient and will reach the break point at an earlier time or at lower levels of stress than those with "well-built" routines and structure. The velocity and timing of the break point depend on the extent to which people are able to sustain routines and structure.

Drive to Thrive: A Theory of Resilience Following Loss

Wai Kai Hou⊡, Brian J. Hall & Stevan E. Hobfoll



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STUDENTS NEED COMPASSION

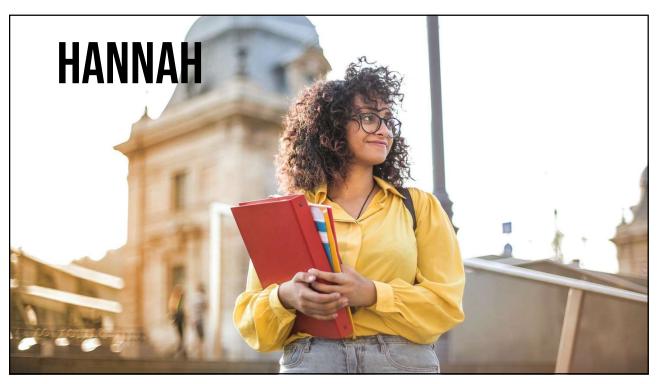
As they are facing unprecedented challenges (and higher rates of working and caretaking)

As learning is relational

As the classroom is a collective social setting where emotional contagion guides motivation

WHAT STUDENTS ALSO NEED

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Yesterday in a class, I volunteered to present my project first. That would never have been me during freshman year.

So I would say that yeah, anxiety has impacted the way I learn. It makes me *more* engaged.

Hannah, Student Voices Participant

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AVOIDANCE REINFORCES ANXIETY

"Tension and turmoil, we find, are strange creatures...when we shrink from pressure and fear, they just take on new, harrowing proportions."

- Lisa Damour, Under Pressure: Confronting the Epidemic of Stress and Anxiety in Girls





Cognitive, Affective, & Behavioral Neuroscience (2021) 21:1-13 https://doi.org/10.3758/s13415-020-00855-9

Absence Makes the Mind Grow Fonder: Reconceptualizing Studies of Safety Learning in Translational Research on Anxiety

Hyein Cho 1,2 • Ekaterina Likhtik 3,4 • Tracy A. Dennis-Tiwary 2,1

Table 1 Known effects of explicit safety learning (i.e., the presence of safety signals) from animal and human studies

_	35
	Reward effects (Rogan et al., 2005; Sangha et al., 2013)
•	Positive affect ("shelter-like" affect; Rogan et al., 2005)
	Increase in explorative behavior in novel environments

- Increase in BDNF Expression (Pollak et al., 2008) • Regulation of amygdala miRNA expression (Ronovsky et al., 2019) • Reduction in spine size on synapses of the lateral amygdala (Ostroff et al., 2010)
- (Pollak et al., 2008, Nahmoud et al., 2020) • Increase in movement in the forced swim test (Kong et al., 2014; Pollak et al., 2008)

Behavioral effects of safety learning

Unique involvement of the posterior insular cortex during stress mitigation (Christianson et al., 2008, 2011)

Neurobiological effects of safety learning

- Mitigate the consequences of intermittent stressors (e.g., shock; Christianson et al., 2011, 2012)
- Reduction in activity in the amygdala and increased activity in the dorsolateral prefrontal cortex measured via diffusion tensor imaging (Pollak, Rogan, et al., 2010)

WE ARE NOT CLINICIANS

We must create learning environments that support student mental health and well-being rather than attempting to treat mental illness

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WELL-BEING IS COMPRISED OF...

positive emotions

a sense of meaning and purpose

life satisfaction

ability to pursue self-defined goals

COMMENTARY / OPINIONS | Published: 15 November 2022

Emotional Well-Being: What It Is and Why It Matters

Crystal L., Park , Laura D. Kubzansky, Sandra M. Chafouleas, Richard J. Davidson, Dacher Keltner, Parisa Parsafar, Yeates Conwell, Michelle Y. Martin, Janel Hanmer & Kuan Hong Wang

Affective Science 4, 10-20 (2023) | Cite this article

 $\textbf{2880} \ \, \textbf{Accesses} \ \, \big| \ \, \textbf{12} \ \, \textbf{Citations} \ \, \big| \ \, \textbf{21} \ \, \textbf{Altmetric} \ \, \big| \ \, \underline{\textbf{Metrics}}$

Abstract

ALL OF THESE CAN BE COMPONENTS OF A WELL-RUN COLLEGE CLASS

exposure to vulnerability and risk taking in a safe setting

positive emotions

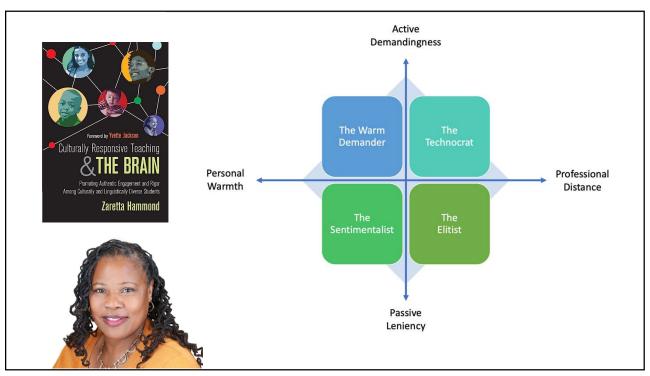
a sense of meaning and purpose

life satisfaction

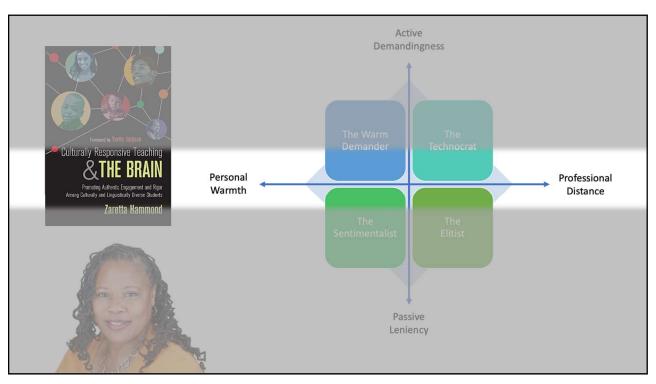
ability to pursue self-defined goals



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DISCUSSION BREAK

- What are the ways you have been **too distant/inflexible** in ways that were detrimental to you and/or your students?
 - What are the ways you have been too lenient/had low expectations in ways that were detrimental to you and/or your students?
 - What are the ways in which you could instead model being a **warm demander**?

THE PATH AHEAD







roblems Science Solutions

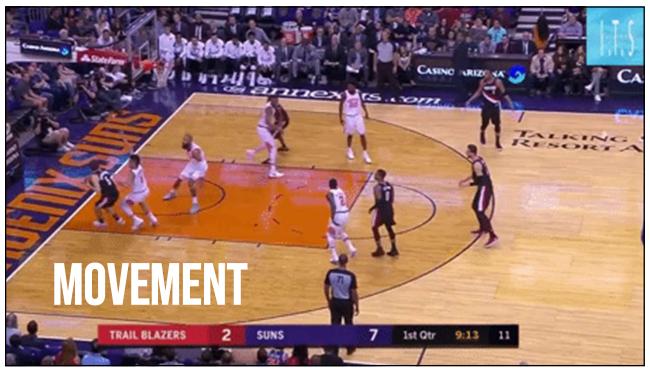
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COMPASSIONATE CHALLENGE GUIDELINE #1:

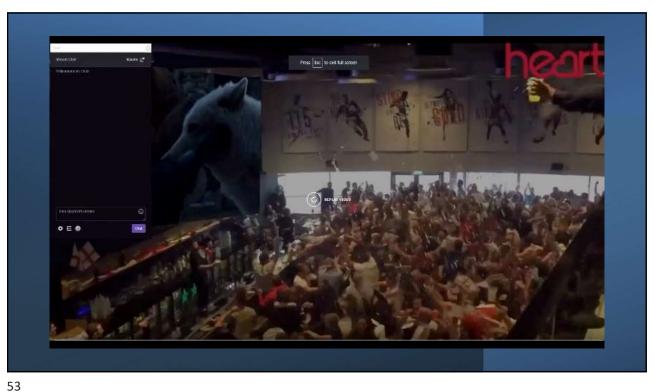
Build classroom community from the very first day, with attention to inclusivity



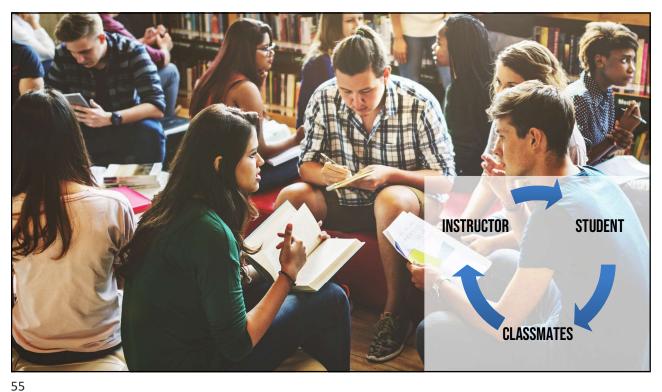












Journal of Educational Psychology 2009, Vol. 101, No. 3, 705-716

© 2009 American Psychological Association 0022-0663/09/\$12.00 DOI: 10.1037/a0014695

Emotional Transmission in the Classroom: Exploring the Relationship Between Teacher and Student Enjoyment

Anne C. Frenzel University of Munich

Thomas Goetz University of Konstanz and Thurgau University of Teacher Education

Oliver Lüdtke Max Planck Institute for Human Development

Reinhard Pekrun University of Munich

Rosemary E. Sutton Cleveland State University

"The findings of the present study indicate that teacher enjoyment and student enjoyment in mathematics classrooms are closely linked and that the effects of teacher enjoyment on student enjoyment are mediated by teachers' displayed enthusiasm."



"Basically, whatever the professor is like reflects on the students, and vice versa. If they're feeling some type of way, then we're also going to be feeling that way."

VOICES PARTICIPANT

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"There is a feeling you get in a class where participation is crucial...it's almost a synergistic effect...I'm addressing the professor, but at the same time I'm addressing everyone else in the class and...I'm so much more interested in doing the reading and coming to class prepared and wanting to discuss the material."

VOICES PARTICIPANT



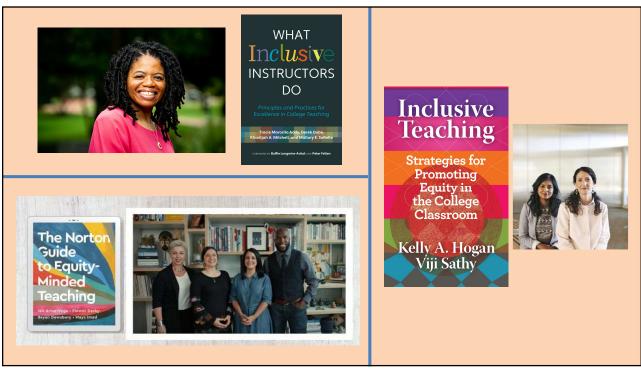
"It also depends on the teacher's mood in the morning, I have to say. Fridays are happier than Mondays."

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Use Community building activities – online and off

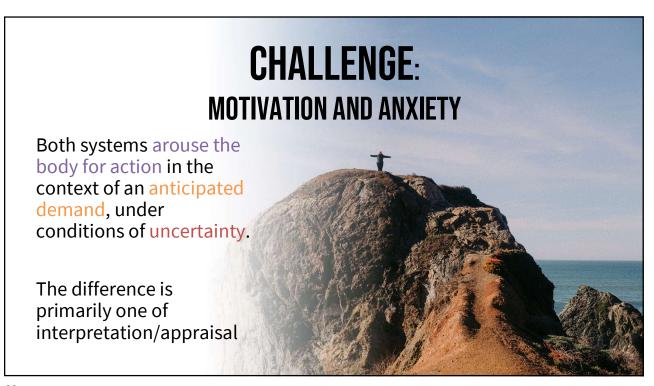






COMPASSIONATE CHALLENGE GUIDELINE #2:

Help students reframe the roles of uncertainty, discomfort, and failure in learning



Synonyms/related Challenge Activation Appetitive Measurements at rest or baseline Autonomic nervous system Hormones Higher testosterone Lower cortisol Autonomic nervous system Autonomic nervous system Measurements during reactivity or challenge Autonomic nervous system Autonomic nervous Measurements during reactivity or challenge Autonomic nervous System Autonomic nervous Moderate increases in SNS Decreases in heart rate Variability Decreased heart rate variability Decreased heart rate variability Autonomic nervous Moderate cortisol increases Testosterone increases Cortisol increases Moderate testosterone increases Moderate testosterone increases Moderate testosterone increases	tivation	Inhibition Withdrawal Defensive	Mental demand Engagement	
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		Cortisol increases	Moderate testosterone	ases
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COGNITION AND INSTRUCTION 2019, VOL. 37, NO. 1, 73-92 https://doi.org/10.1080/07370008.2018.1539737



"It's Scary but It's Also Exciting": Evidence of Meta-Affective Learning in Science

Jennifer Radoff (b) a, Lama Ziad Jaber (b) b, and David Hammer (b) c

^a University of Maryland, College Park, Maryland, USA; ^b Florida State University, Tallahassee, Florida, USA; ^c Tufts University, Medford, Massachusetts, USA

ABSTRACT

We study the case of Marya, a freshman engineering major who showed and spoke of a drastic shift in her feelings and approach to learning physics during an introductory course. For the first several weeks, she was anxiously manipulating equations without considering physical meaning, and she was terribly worried about being correct. By the end of the semester, however, she was sense-making and taking pleasure in it, showing and expressing an enjoyment of challenges and uncertainty. In this paper, we illustrate Marya's transformation using data from her interview and coursework, and we propose it as an example of *meta-affective learning*. We argue that meta-affective learning was an important part of Marya's physics learning and that it was deeply entangled with her developing epistemology.

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EPISTEMIC VEXATION

"TORMENT OF THE UNKNOWN"

"THE JOY OF GOING AT IT"

"ANGST REQUIRED TO MOTIVATE THE SEARCH"

"FINDING PLEASURE IN MYSTERY"

- Physicist Jennifer Radoff



Meet Marya.

First Year Engineering Major STUDENT IN INTRO PHYSICS Memorizing facts and formulas, anxious about getting things "wrong" on the first try. Worse for exams.

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DECREASING UNCERTAINTY INTOLERANCE

Syllabus learning goal "experience physics as a refinement of everyday thinking"

Credit on problem sets = effort, not answers

Labs = self-designed, self-carried out experiments

Online text with checkpoint questions

Clickers in class

Weekly discussion sections led by TAs

Explicit conversations about emotions, confusion, & uncertainty as part of the process of doing science

Radoff, Jaber, & Hammer, 2019

Section	Epistemology	Meta-affect
3.1.1	Physics is about absolute rights and wrongs	Anxiety about feeling uncertain
3.1.2	<i>Physics</i> is about the journey and the question	Comfort with feeling uncertain
3.1.3	Doing physics is a process of making sense of	Excitement about feeling uncertain
	the world	

Table 1. Patterns of relationship between epistemology and meta-affect



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This whole anxiety about not knowing, it disappeared and it was like, oh, I don't know, but ok, we can work it out, you know? And if we don't, then we have a question that we're just gonna have to wonder about.

UNCOMFORTABLE AND UNMANAGEABLE ARE NOT THE SAME THING

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COMPASSIONATE CHALLENGE GUIDELINE #3:

Incorporate a sense of play or improvisational learning

Play is About
Learning – but
Animals Don't
Engage in
Play in
"Harsh
Conditions"



(Spinka, Newberry, and Bekoff, 2001)

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PLAY: TRAINING FOR THE UNEXPECTED







Unexpected movements (falling, being pushed over)

Unexpected stress and loss of resources (held captive, attacked)

Alternating being in and out of control

Alternating status

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PLAY

Low stakes, fun, engaging, cognitive, social, safe, new, competitive, active, clear, learning of subject.



Freedom to engage without judging yourself is play.



Low-stakes teamwork that is enjoyable is play.



Improv experience promotes divergent thinking, uncertainty tolerance, and affective well-being

Peter Felsman^{a,b,c,d,*}, Sanuri Gunawardena^c, Colleen M. Seifert^c

- *Alan Alda Center for Communicating Science, Stony Brook University, United States
 *Department of Psychology, Stony Brook University, United States
 *Department of Psychology, University of Michigan, United States

 d School of Social Work, University of Michigan, United States

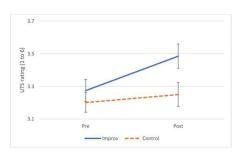


Fig. 5. Experiment 2 mean UTS ratings and standard errors at pre and post-treatment.

Results: This paper replicates the prior finding that improvisational theater training can improve divergent thinking (e.g., Lewis & Lovatt, 2013; Sowden et al., 2015), and provides new findings that improv can boost positive affect and increase uncertainty tolerance relative to other social interactions.

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PLAY IN ON-THE-GROUND ENVIRONMENTS



"Warm up" Activities



Movement



Innovate Grading



Role Play & Improv



Interrupt the Routine

PLAY IN ONLINE AND BLENDED ENVIRONMENTS











Collaborative Google Slides

Pinboards

Off-screen Activities

Use the Chat

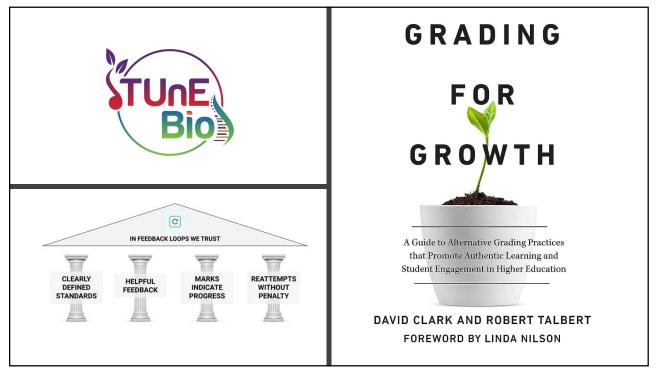
Polls

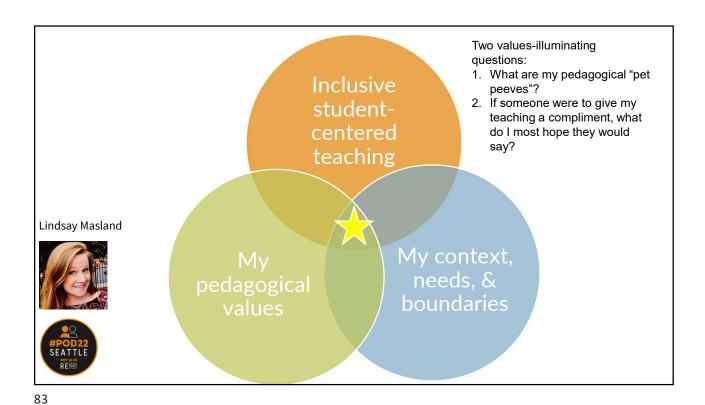
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COMPASSIONATE CHALLENGE GUIDELINE #4:

Challenging but compassionate course structure: lower stakes, lots of feedback, & "flexibility with guardrails"







TRANSFORMING ASSESSMENT, FEEDBACK, & GRADING IN UNDERGRADUATE BIO EDUCATION (NSF RCN-UBE)

COMPASSIONATE CHALLENGE GUIDELINE #5:

Have a plan for addressing "hot moments"

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10 In the Moment Responses for Addressing Micro and Macroaggressions in the Classroom

Updated: May 17
<u>Chavella Pittman</u>
Dominican University

Remind of classroom goals & expectations.

6. You do not have to agree with the course material. However, you do have to demonstrate that you understand and can communicate the disciplinary perspective presented in this course's material.

7. This classroom is a place where we can discuss and interrogate ideas; however, we do so with respect and in the context of the course material.

8. Free speech is allowed as all students are encouraged to respectfully share their perspectives and ideas as a part of the process of learning the course material.

 Possible follow-up: As this is a course and classroom in a college setting, ideas and perspectives must be articulated in a manner consistent with the behavior expectations of the classroom/university and which furthers students' mastery of the presented course material.



COMPASSIONATE CHALLENGE GUIDELINE #6:

Know your campus resources - and use them

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SAMPLE CAMPUS RESOURCES

Counseling center

Financial aid office

Advising/coaching offices

Tutoring

Multicultural center

Bias reporting

"Care team" / Dean's Council / Early alert

"Red book"

Library

Campus health services

COMPASSIONATE CHALLENGE GUIDELINE #7:

Know the limits of your role, and set boundaries to protect your own well-being

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MENTAL HEALTH = BALANCING ENERGY DEPOSITS & WITHDRAWALS



Allostasis is the process by which the body responds to stressors in order to regain homeostasis.



Doing this effectively requires adding biological resources (nutrition, sleep, rest) and spending them wisely.



Your brain is part of your body! And your body is part brain.



These biological resources fuel not just your physical but also your mental health – and good mental health fuels the budget.

"Boundaries are the distance at which I can love you and me simultaneously."

Prentis Hemphill



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THREE QUESTIONS TO ASK YOURSELVES





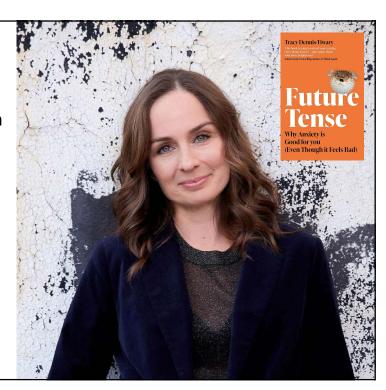




Hope, ambition, and drive live in that space between the present and the uncertain future.

So when we engage with our anxiety, we can also leverage all the possibilities of the future.

Tracy Dennis-Tiwary, Clinical psychologist & author



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