



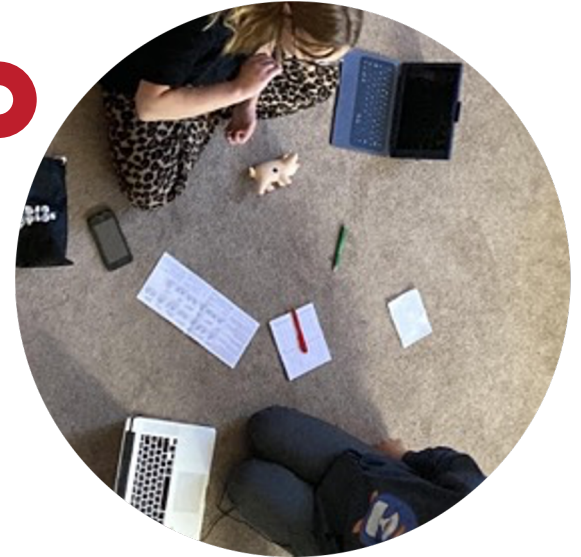
The Spark of Online Learning



How Technology and Emotion
Science Invigorate Every Class



Meet Flower Darby





Ask yourself

What one word
describes how
you feel
about online teaching?



Other people
help us be
successful

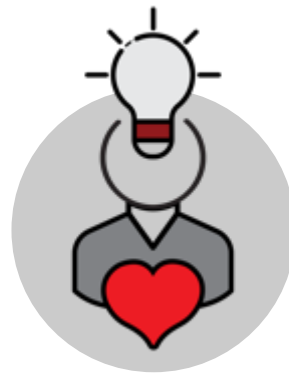
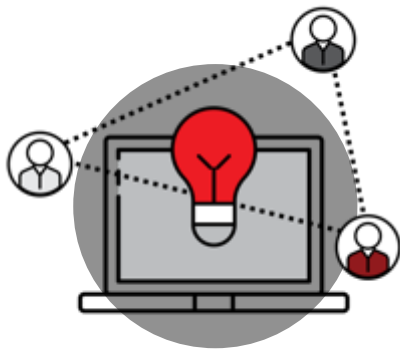
Connect

with the people in our classes



Help students


connect more deeply
with class materials



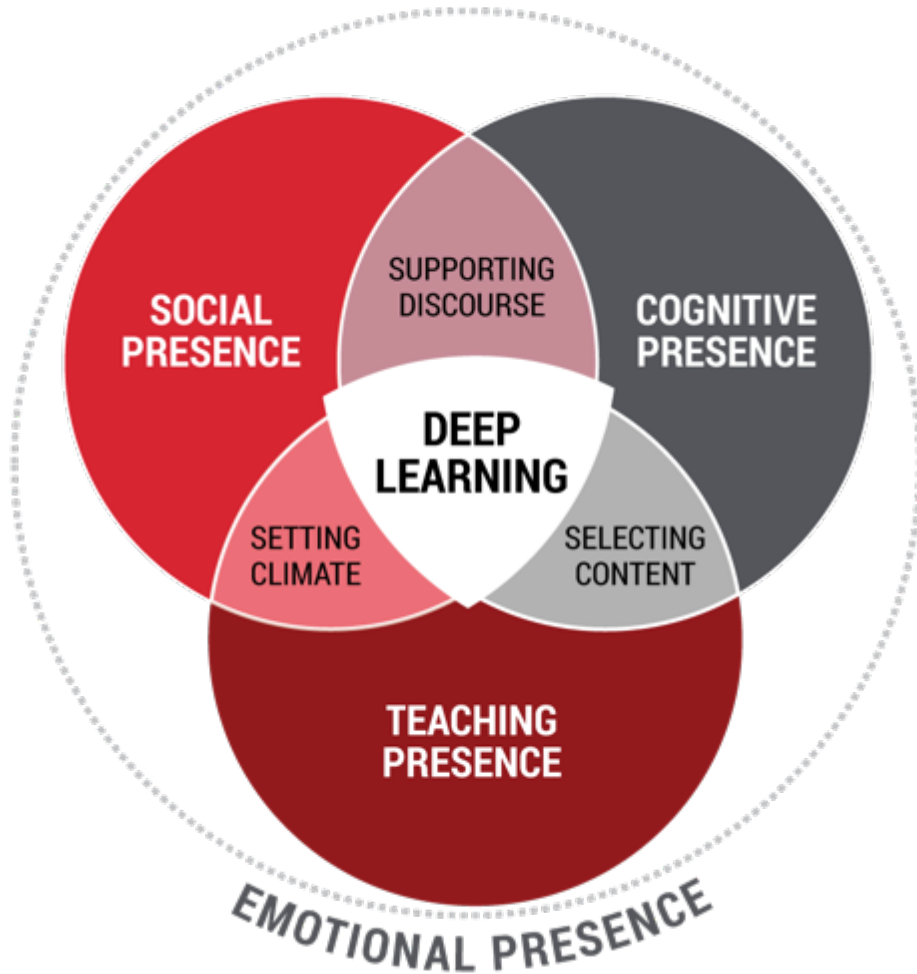




Understandably
anxious

A black and white photograph of an empty classroom. In the foreground, there is a white desk with two drawers. Behind it, several rows of black metal-framed desks with attached chairs are visible. Some chairs are slightly tilted. To the left, there is a window with a white frame and a small sign on the glass. To the right, a whiteboard on a stand is visible against the wall. The room is brightly lit, likely from the window.

What do we
know about
online
classes?



Modified
**Community
of Inquiry**
Framework



Emotion and Cognition

Attention

Motivation

Memory



Emotions to

Connect

Engage

Motivate



Practical Strategies

Synchronous and

Asynchronous

Harness the **Science** of Emotion

Attention

Motivation

Memory

Sarah Rose Cavanagh
Assumption University



*The Spark of Learning: Energizing the College
Classroom with the Science of Emotion (2016)*



“ emotion and
cognition are
supported by
**interdependent
neural processes**

Mary Helen Immordino-Yang
University of Southern California

Emotions, Learning, and the Brain (2016)

Emotion and Cognition





Emotions

**grab our
attention**



Emotions

motivate

us



Emotions

maximize

working memory



Emotions

maximize

long-term memory

A large, semi-circular graphic on the left side of the slide with a red, distressed, and textured appearance, resembling a worn surface or a piece of old paper.

Emotions

steer

our decisions



“ it is literally
neurobiologically
impossible
to think about things
you don't care about

Mary Helen Immordino-Yang

University of Southern California

Emotions, Learning, and the Brain (2016)

<https://well.blogs.nytimes.com/2016/05/04/to-help-students-learn-engage-the-emotions/?smid=fb-nytimes&smtyp=cur>

Emotion and Academic Achievement





Positive emotions

**predict academic
achievement**



Positive emotions

**facilitate
self-regulated
learning**



Negative emotions
**impede
cognitive
engagement**



Ask yourself

What can we do to
maximize positive and
minimize negative
learning experiences?



Ask yourself

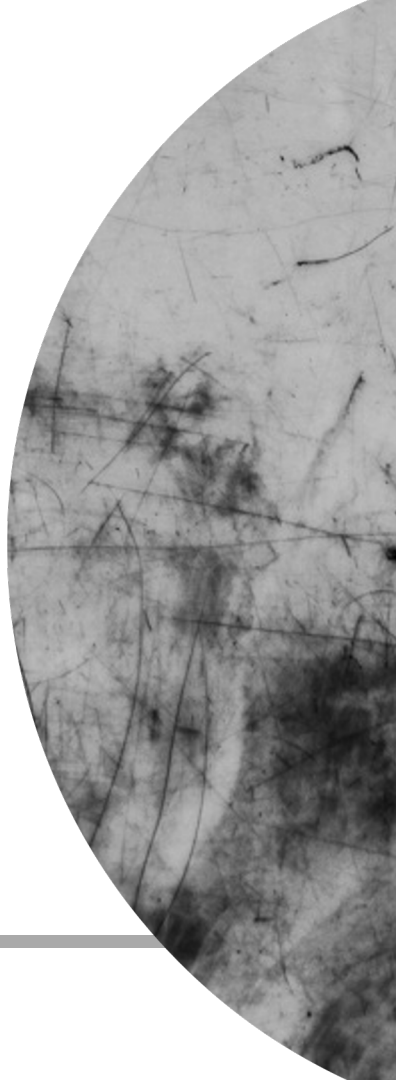
What has been
most interesting
so far?

Practical strategies

Synchronous and Asynchronous



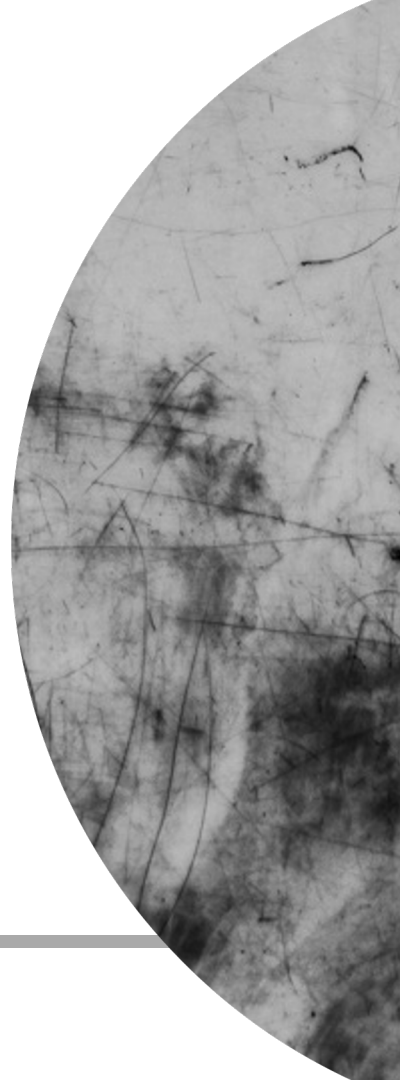
Sustain a
welcoming
tone



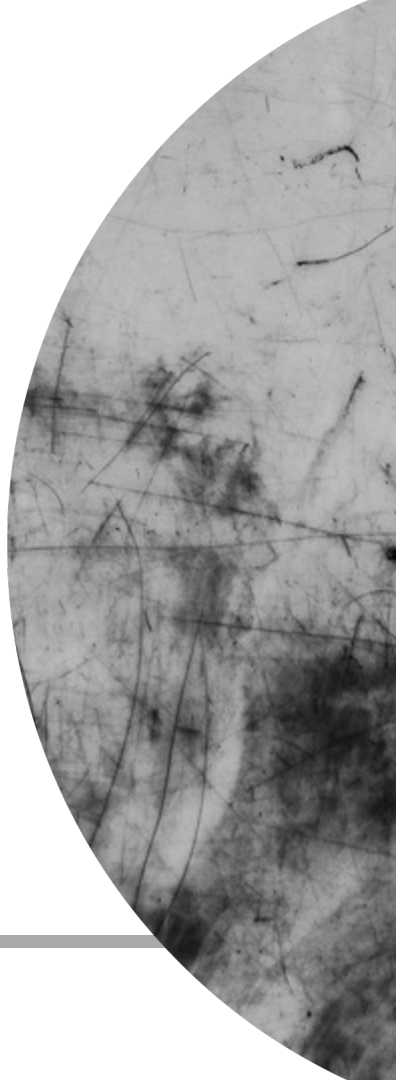
Be

vibrantly

yourself



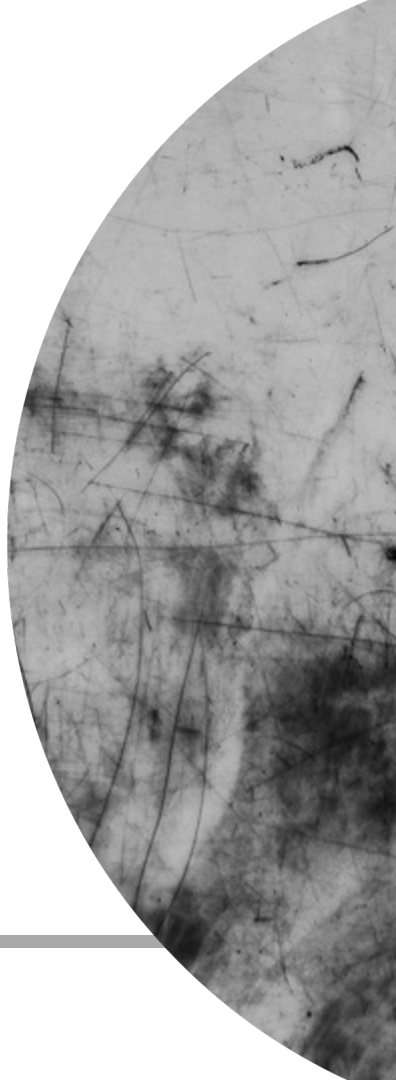
Bring your
passion
to energize
the atmosphere





Design for **emotion**

Engage
curiosity
and **interest**



What we know



x% **agree** with increased access

about online faculty

What we know



79% agree with increased access

about online faculty

What we know



**What % think online classes
don't work?**

about online faculty

What we know



**Almost half think online classes
don't work**

about online faculty

What we know



x% **prefer** to teach online

about online faculty

What we know



9% **prefer** to teach online

about online faculty



Ask
interesting
questions ...

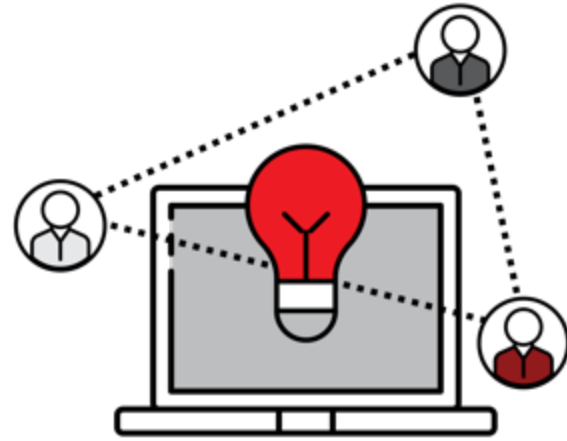


Create
interesting
scenarios



Design for **choice**

Universal Design for Learning Framework



UDL +1 thinking

Thomas Tobin

University of Wisconsin Madison



*Reach Everyone, Teach Everyone: Universal Design
for Learning in Higher Education (2018)*



Design for **fun**

[A Game a Day: Fun and Dynamic Synchronous Online Learning, Lisa Forbes](#)

[Fostering Fun: Engaging Students With Asynchronous Online Learning, Lisa Forbes](#)



Ask yourself

What one word
describes how
you feel
about online teaching?



Questions and Discussion



Recommended Resources

The Spark of Learning: Energizing the College Classroom with the Science of Emotion

by Sarah Rose Cavanagh (2016)

Small Teaching Online: Applying Learning Science in Online Classes

by Flower Darby and James M. Lang (2019)

Emotions, Learning, and the Brain: Exploring the Educational Implications of Affective Neuroscience

by Mary Helen Immordino-Yang (2016)

Minds Online: Teaching Effectively With Technology

by Michelle Miller (2014)

Reach Everyone, Teach Everyone: Universal Design for Learning in Higher Education

by Thomas J. Tobin and Kirsten T. Behling (2018)