“I really can't thank you enough. The experience was invaluable. Parts of it were haunting and reassuring and exciting and humbling. It is hard to pinpoint exactly how, but this "conference" was somehow different. I feel changed, like I somehow get something I didn't get before. It's daunting because I can glimpse the enormity of what is ahead of me, of what has always been there that I couldn't quite see (though I am just beginning to see aspects of it). I am also filled with great hope. I do not feel alone. I have incredible hope that I can make even better use of my time with my future students, that I can reach them on a more significant level, that I can help open more doors for more of them. I have the opportunity to help make this a more meaningful experience for all of us.”
Faculty Driven Professional Development for Equity Based Instructional Innovation and Campus Cultural Transformation

Strengthening Student Success Conference October 4, 2018
Communicate Learning Objectives: Be Transparent

After completing this workshop participants will be able to...

1. Broadly define and apply non-cognitive learning and understand the relationship between non-cognitive learning, belonging, and student success and equity
2. Leave the workshop with non-cognitive tools and strategies that can be immediately applied in the classroom and campus programs.
3. Apply a model for faculty-led equity-based cultural transformation at their home institution.
Communicate Goals: Be Transparent

Benefits

1. Provides all students with access to learning goals.
2. Includes students in the construction of class content and learning goals.
3. Highlights relevance of course material.
4. Reviews how course content is connected to learning goals.
5. Formative assessment
What is non-cognitive? Also called Affective Learning, Social Emotional Learning, 21st Century Skills Learning

Foundational social, emotional, and mindset skills and knowledge a student needs to have in place for cognitive/content learning
Students without affective, non-cognitive skills have little chance at college success regardless of the special classes, extra services, and basic skills they are provided. Fortunately, non-cognitive skills can be taught and, once learned, will allow for the attainment of cognitive skills.

These skills can be taught, but often they simply need to be identified.

This Workshop is Pedagogical and Experiential
What is Belonging?

- Feeling part of a community and cared about

- Feeling “personally accepted, respected, included and supported by others in the school environment.” (Goodenow, 1993)

Two types of Belonging

- Academic Belonging

- Social Belonging
Research shows that students who believe they belong
- Earn higher grades and test scores
- Attend class regularly
- Stay in school longer/persist

• Less likely to smoke, drink alcohol, or have sexual intercourse.

• Less likely to carry weapons, become involved in violence, or be injured from dangerous activities such as drinking and driving.

• Less likely to have emotional problems, suffer from eating disorders, or experience suicidal thoughts or attempts.

Why does this matter at our Hispanic Serving Institution (HSI)?

Students of color are more likely to enter college believing that they do not belong socially, culturally, and academically. This belief that they do not belong leads to lower grades and persistence rates.

Murphy and Zirkel (in press)

Research documents a low sense of self and the belief that one does not belong in higher education to be among the greatest inhibitors to success for Hispanic college students.

Przymus (2012)
Four Broad Categories of Non-cognitive Pedagogy

1. Cultural Wealth and Relevance
2. Social-Emotional Communication
3. Neuroplasticity and Brain Science
4. Mindfulness
Affective Learning Institute

3 days
Overview of Non-cognitive Learning

Pedagogical/Experiential

Colleague Led Rotating 5-9 facilitators
ALI Facilitators (15 total)

Jenny Baxton, English, Neuroplasticity and Brain Science
Ellen Carey, Library Studies, Mindfulness
Thomas Carrasco, Ethnic Studies, Community Cultural Wealth and Relevance
Melinda Gandara, Ethnic Studies, Community Cultural Wealth and Relevance
Luis Giraldo, Director of Equity, Community Cultural Wealth and Relevance
Pam Guenther, Mathematics, Neuroplasticity and Brain Science
Rebecca Gutierrez, Communication Studies, Social-Emotional Communication
Elizabeth Imhof, FRC Director, Lead Facilitator
Tina Kistler, Communication Studies, Social-Emotional Communication
Kenley Neufeld, Dean of Library and Humanities, Mindfulness
Alice Perez, Former Social Science Dean, Experiential Learning Strategies
Joshua Ramirez, Psychology, Neuroplasticity and Brain Science
Z Reisz, Institutional Research, Neuroplasticity and Brain Science
Leida Tolentino, Psychology, Neuroplasticity and Brain Science
Christopher Ulivo, Art, Experiential Learning Strategies
Cultural Wealth and Relevance
YOU KNOW MY NAME
NOT MY STORY.
Does every student see self in course content and campus programs?

Communities of Color Cultural Wealth
— Tara Yosso – “Whose Culture has Capital?”

- Aspirational Capital: resiliency and ability to nurture hopes and dreams
- Linguistic Capital: intellectual and communication skills used with multiple languages
- Familial Capital: produced and maintained by family members
- Social Capital: people and community resources
- Navigational Capital: ability to maneuver through systems that are often hostile to people of color
- Resistant Capital: knowledge and skills used to challenge inequality and oppression

Sources


Categories Activity

Rules:

1. Pretend that all of the items are real.

2. You must have at least three categories, but fewer categories than the number of items in your bag.

3. You must be able to describe the criteria you used for your categorization scheme, and “sell” your scheme to other groups (i.e. explain why is this the best way to organize the objects in your bag).
Which of these things is not like the others?
What is the “right” way to organize things?

Democratization of knowledge and learning
Teachers as facilitators of learning

Weird, or just different?
Social-Emotional Communication
Social-Emotional Communication

• **Social-emotional communication**: Communicative exchanges that focus on developing or maintaining affective ties (Morand, 2010).
Communication Principles

Communication is transactional
Communication Principles
Communication is transactional.

Frames of reference:
• Cultural, ethnic, racial background
• Education level
• Accumulation of life experiences

Contextual factors:
• Social, relational, cultural
Peanut Butter and Jelly Activity

A visitor has just arrived to Earth from a distant Planet. They want to learn to make an Earth delicacy. You suggest PB&J.

Create a recipe card for our guest. Remember they have no knowledge of Earth culture so make the directions as clear and detailed as possible.
PB&J More than just a yummy treat (why we got messy)
Fosters an inclusive learning environment in which all students understand expectations
Increases Instructor Immediacy
Establishes student trust
Prevents student frustration
Essential for effective classroom management
Produces better work product
Social-Emotional Communication

Immediacy

• Immediacy is the perception of physical and psychological closeness between communicators. Instructional immediacy is behavior that brings the instructor and the students closer together in terms of perceived distance.

• When students perceive their instructor as highly immediate, their perceptions of instructor credibility are increased (Schrodt & Witt, 2006) and they report greater feelings of affect for the instructor and the course (Comadena, Hunt, & Simonds, 2007).

• A meta-analysis of 81 studies on immediacy and learning demonstrated immediacy as the most highly associated with affective learning (Witt, Wheeless, & Allen, 2004).
Neuroplasticity and Brain Science

“Any man could, if he were so inclined, be the sculptor of his own brain.”

Santiago Ramón y Cajal, 1906 Nobel Laureate
Can You Remember This?

Memory DEMONSTRATION
What is a Memory, Anyway?

• A network of brain cells
• “Connected or dumped”!
• NOT a snapshot of reality!
“New with Known”: Activate Prior Knowledge

Mindmaps:
- Mindmeister.com
- mindmapping.com
Mechanisms of Plasticity: How does the brain change *with experience*?

- **Modified connections** (synapses & myelination)
- **Chemical efficiency**


*Plasticity is not good or bad: It is pure adaptation!*
Every Brain is Unique

All of our behaviors and experiences change our brains. Every time you learn a new fact or skill, you change your brain.

Patterns of neuroplasticity are highly variable from person to person.

Increased difficulty and struggle during practice leads to more learning and structural change in the brain.

Will we all grow our brains at the same pace and in the same way?
GROWTH MINDSET CLASSROOM PRACTICES

- Explain to students how learning works/neuroplasticity
- Make praise & feedback process-oriented (effort; progress)
- Integrate chances to revise or revisit assignments
- Include opportunities for student reflection / metacognition
- Create desirable difficulties in the classroom (i.e. frequent, low-stakes quizzing)
- Consider flexible grading scheme that incorporates growth over time
- Have students track their progress & skills acquired
- Talk about mindset theory with students as they approach exams / projects
- Teach students how to study
- Be explicit about how deliberate practice helps students gain mastery
Growth Mindset about our students’ abilities to learn

Not enough to HAVE a growth mindset.

Classroom practices are linked to developing students’ growth mindsets. (Sun, 2015)

Teachers cannot just be cheerleaders; we need to have

1. HIGH EXPECTATIONS of our students,
2. teach them HOW THEIR BRAINS LEARN and how they LEARN EFFECTIVELY, and
3. teach APPROPRIATE LEARNING STRATEGIES for our disciplines.
CAUTION! Growth Mindset is not a panacea!

There are other factors in motivation and it does not address or solve issues such as systemic bias and lack of resources.

It is only one component of academic belonging. We must be careful it does not add to a deficit model of students or for students.

“Self-belief does not necessarily ensure success, but self-disbelief assuredly spawns failure.” (Bandura, 1997)
Mindfulness
The state of being calmly, intentionally and actively aware of what one is feeling, thinking and doing; hence the state of being attentive to the moment without becoming entangled in it. Mindfulness is the aim of some meditation techniques in which the person is trained to be attentive to thoughts, feelings and actions without imposing judgements on the latter.

Chocolate Guided Meditation
Mindfulness Research

Better academic performance

- Boosted working memory (Davis & Hayes, 2011)
- Increased ability to focus attention and suppress distracting information (Davis & Hayes, 2011)
- Increased cognitive flexibility (Davis & Hayes, 2011) and cognitive control (Schonert-Reichl et al., 2015)
- Apparent increase in information processing speed, as well as decrease in task effort and in thoughts that are unrelated to the task at hand (Davis & Hayes, 2011)
References


Affective Learning Institute Alumni

At the present moment, how important do you feel affective/non-cognitive instruction is for successfully teaching your classes?

- 0 (0%)
- 1 (0%)
- 2 (0%)
- 3 (7.7%)
- 4 (42.3%)
- 5 (50%)
ESCALA/ Scholarship on Teaching and Learning Institute and Research Fellowship

For LatinX or low-income students in the gateway STEM courses during Fall 2017 who received instruction from ESCALA faculty, the success rate was 6% higher.

6% = an additional 50 successful underserved STEM students!
Formative Assessment: How Well Did We Meet These Learning Goals?

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Thank you!

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