



# Cultural Competency in the Undergraduate Classroom: Cross-Disciplinary Tools, Insights, and Strategies to Promote Student Success

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**Please sit with a  
person you don't  
know! Make a  
new colleague!**

# Meet a New Colleague!

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Share with a person near you that you do NOT already know...

1. Your name
2. Your institution and department
3. Something about the characteristics of the students that you teach or work with...



# SEPAL: The Science Education Partnership and Assessment Laboratory

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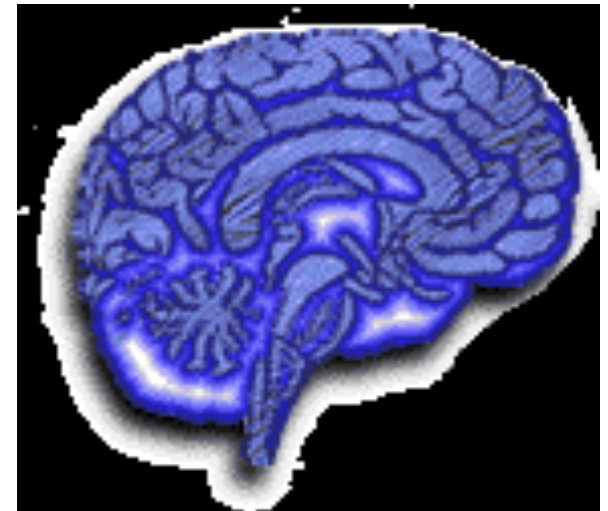
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(≈ The Tanner Laboratory)

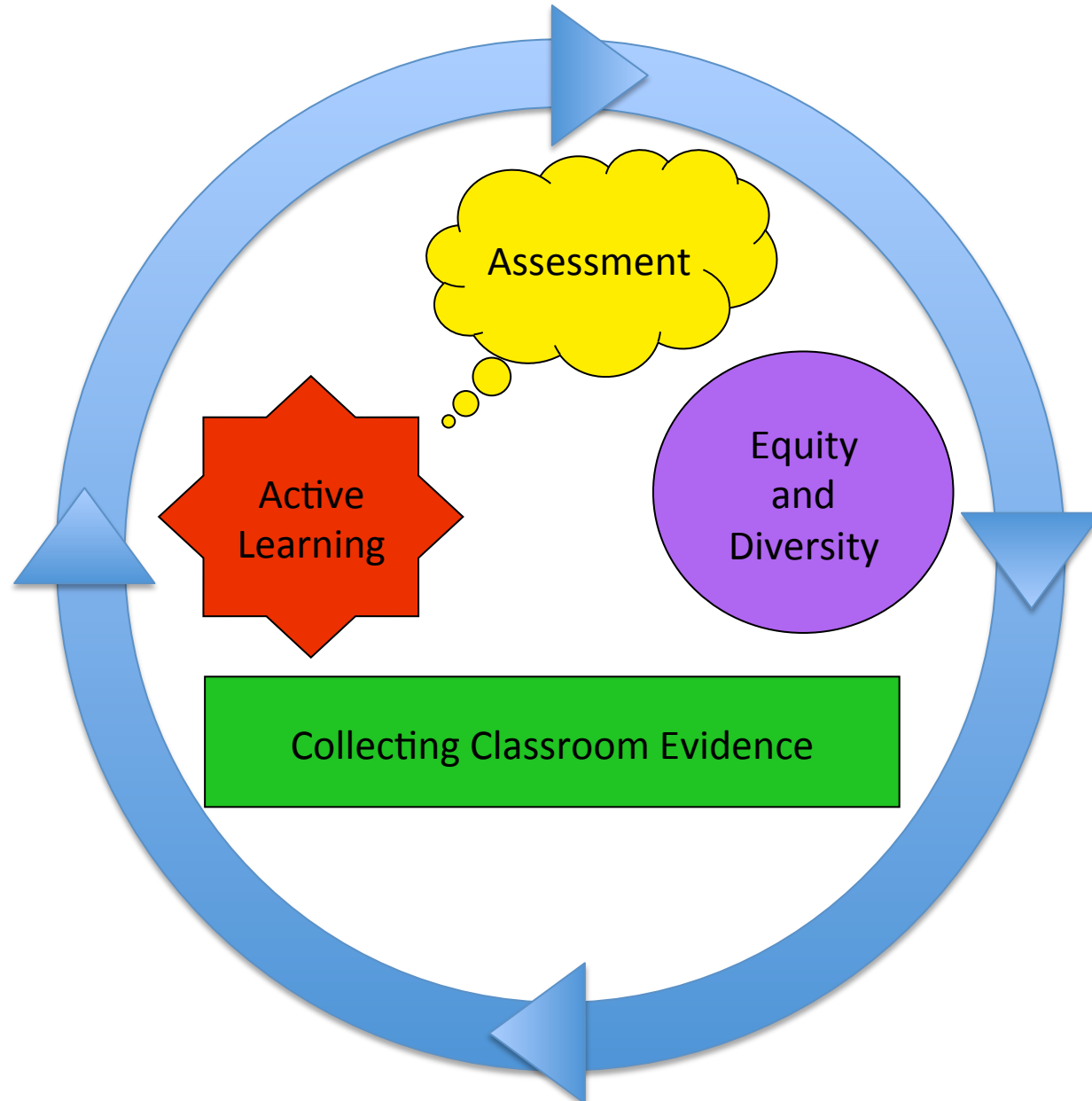
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NSF CAREER Award, and HHMI Undergraduate Science Education Award.*

Founded in 2004...

- **Programs**
- **Coursework**
- **Research**



# Scientific Teaching Framework





# Big Idea: Striving to Construct Learning Environments that Promote Student Success

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## *Goals for our time together...*

**...to explore how the structure of learning environments might influence student success**

**...to unpack concrete teaching strategies that add structure to learning environments and promote fairness and student success**

**...to self-assess current awareness of and use of 20 common teaching strategies**

**...to identify specific teaching strategies that you may want to try in your classroom**

# A Common Experience: Building Mobiles

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*What comes to mind  
when you hear the  
word “mobile?”*



# A Common Experience: Building Mobiles

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- With your group, construct a mobile.
- You will have ~10 minutes to construct your mobile.

# Debriefing the Mobiles Experience: About Awareness...

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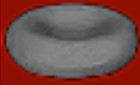


- How *aware* were you about what materials other groups had?
- If you were *aware*, how did it feel to have different materials than other groups?



# Debriefing the Mobiles Experience: **About Actions...**

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- Did your team *ask another team for materials?* Why or why not?
- Did your team *offer another team materials?* Why or why not?



**What might the “Resource Bag” represent in terms of how students experience our undergraduate classrooms differently from one another?**

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# A Common Experience: Building Mobiles

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Adapted from Lawrence, S. M. (1998).  
Unveiling positions of privilege: A hands-on  
approach to understanding racism.  
*Teaching of Psychology*, 25, 198-200.

McIntosh, P. (2003). White privilege:  
Unpacking the invisible knapsack.  
In S. Plous (Ed.), *Understanding Prejudice and  
Discrimination* (pp. 191-195). New York:  
McGraw-Hill.



# Big Idea: Structuring Learning Environments Promotes Fairness and Access for All Students

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**Unstructured learning environments can lead to unfairness, feelings of exclusion, and collisions of students' cultural backgrounds with the learning environment.**

**Adding structure to learning environments can mitigate unfairness, promote feelings of inclusion, and promote student success.**

**One concrete step towards cultural competence is using teaching strategies add structure to learning environments to promote fairness.**

# Big Idea: Cultural Competency and Teaching for Student Success

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Moving away from assumptions that students are lacking...

STUDENT  
DEFICIT  
MODEL

Moving towards the idea that learning environments are lacking (in structure)...

LEARNING  
ENVIRONMENT  
DEFICIT MODEL





# Strategies That Structure Learning Environments and Promote Fairness in Undergraduate Classrooms

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- With a new partner, read through and discuss the descriptions of the 20 Teaching Strategies...
- In the margin, mark strategies with...
  - a “?” if you’d like to know more
  - a “✓” if it’s already familiar to you



# Strategies That Structure Learning Environments and Promote Fairness in Undergraduate Classrooms

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1. Think-Pair-Share
2. Ask Open-ended Questions
3. Allow Students Time to Write
4. Multiple Hands, Multiple Voices
5. Wait Time
6. Hand Raising
7. Use Popsicle Sticks/Index Cards
8. Assign Reporters for Small Groups
9. Whip
10. Don't Judge Responses
11. Use Praise with Caution
12. Learn Students' Names
13. Use Varied Active Learning Strategies
14. Collect Assessment Evidence from Every Student, Every Class
15. Work in Stations/Small Groups
16. Monitor Student Participation
17. Integrate Culturally Diverse and Relevant Examples
18. Establish Classroom Community and Norms
19. Don't Plan Too Much
20. Be Explicit About Promoting Access and Equity for All Students



# Strategies That Structure Learning Environments and Promote Fairness in Undergraduate Classrooms

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- With your partner, self-assess your previous experience using each of the 20 Teaching Strategies and record this on the worksheet on the back.
- In particular, mark each strategy with ...
  - “N” for never used,
  - “O” for occasionally use, or
  - “R” for regularly use
  - “W” for “would like to try!”



# For Further Reading...

## *Feature*

*Approaches to Biology Teaching and Learning*

## **Structure Matters: Twenty-one Teaching Strategies to Promote Student Engagement and Cultivate Classroom Equity**

**Kimberly D. Tanner**

CBE—Life Sciences Education  
Vol. 13, 6–15, Spring 2014

## *Feature*

*Approaches to Biology Teaching and Learning*

## **Considering the Role of Affect in Learning: Monitoring Students' Self-Efficacy, Sense of Belonging, and Science Identity**

**Gloriana Trujillo and Kimberly D. Tanner**

CBE—Life Sciences Education  
Vol. 6, 251–258, Winter 2007

## *Feature*

*Approaches to Biology Teaching and Learning*

## **Cultural Competence in the College Biology Classroom**

**Kimberly Tanner\* and Deborah Allen†**

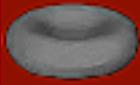
CBE—Life Sciences Education  
Vol. 8, 265–270, Winter 2009

## *Feature*

*Approaches to Biology Teaching and Learning*

## **Learning to See Inequity in Science**

**Kimberly D. Tanner**



# Reflection and Pair Discussion...

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On one side of your index card...

- One thing, if anything, that you learned in this session that will influence your teaching...

On one side of your index card...

- One thing, if anything, that surprised you during this session...





# Thank you for choosing to spend your time with me today...

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