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# Messaging in Culture: Micromessaging to Reach and Teach Every Student™

**Illinois State Department of Education**

**August 8, 2014**

**Claudia Morrell**



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# Agenda

| Topic   | Approximate Time |
|---|------------------|
| Micromessages: Introduction Implicit Bias and | 60 minutes       |
| Micro-inequities and Micro-affirmations       | 75 minutes       |
| Micromessages in Action: Pipe Process         | 60 minutes       |
| Wrap-up                                       | 45 minutes       |



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# Goal

Apply knowledge of implicit bias and micromessaging to create strategies that improve access and equity for every student.





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# Objectives

- Define micromessages, micro-inequities, and micro-affirmations
- Recognize implicit bias that underlies the micromessages
- Become aware of negative biases that affect our communications
- Create action plans to minimize micro-inequities and maximize micro-affirmations



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# Micromessages



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# Activity: Labeling



## Micromessages

Small, subtle, semi-conscious messages we send and receive when we interact with others

### Micro-inequities

Negative micro-messages that cause people to feel devalued, slighted, discouraged, or excluded



### Micro-affirmations

Positive micro-messages that cause people to feel valued, included, or encouraged





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# Lands End Catalog 2012

## super light, superhero tough

**FeatherLights™** reduce their school load by trimming weight off the pack. But what makes them really amazing is they do it without sacrificing durability, thanks to strategically placed 420D and 600D pack cloth.

**Lighter weight. Same awesome durability.**

**Guaranteed. Period.®**

**make it your own!**  
with a monogram,  
embroidery or both!  
details, p. 76



3. rich red  
(webbing: bright lime)

clip-on  
flashlight, p. 77





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# Lands End Catalog 2012

light as a feather,  
tough as long division

**FeatherLights™** reduce their school load by trimming weight off the pack. But what makes them really amazing is they do it without sacrificing durability thanks to strategically placed 420D and 600D pack cloth.

**Lighter weight. Same awesome durability.**

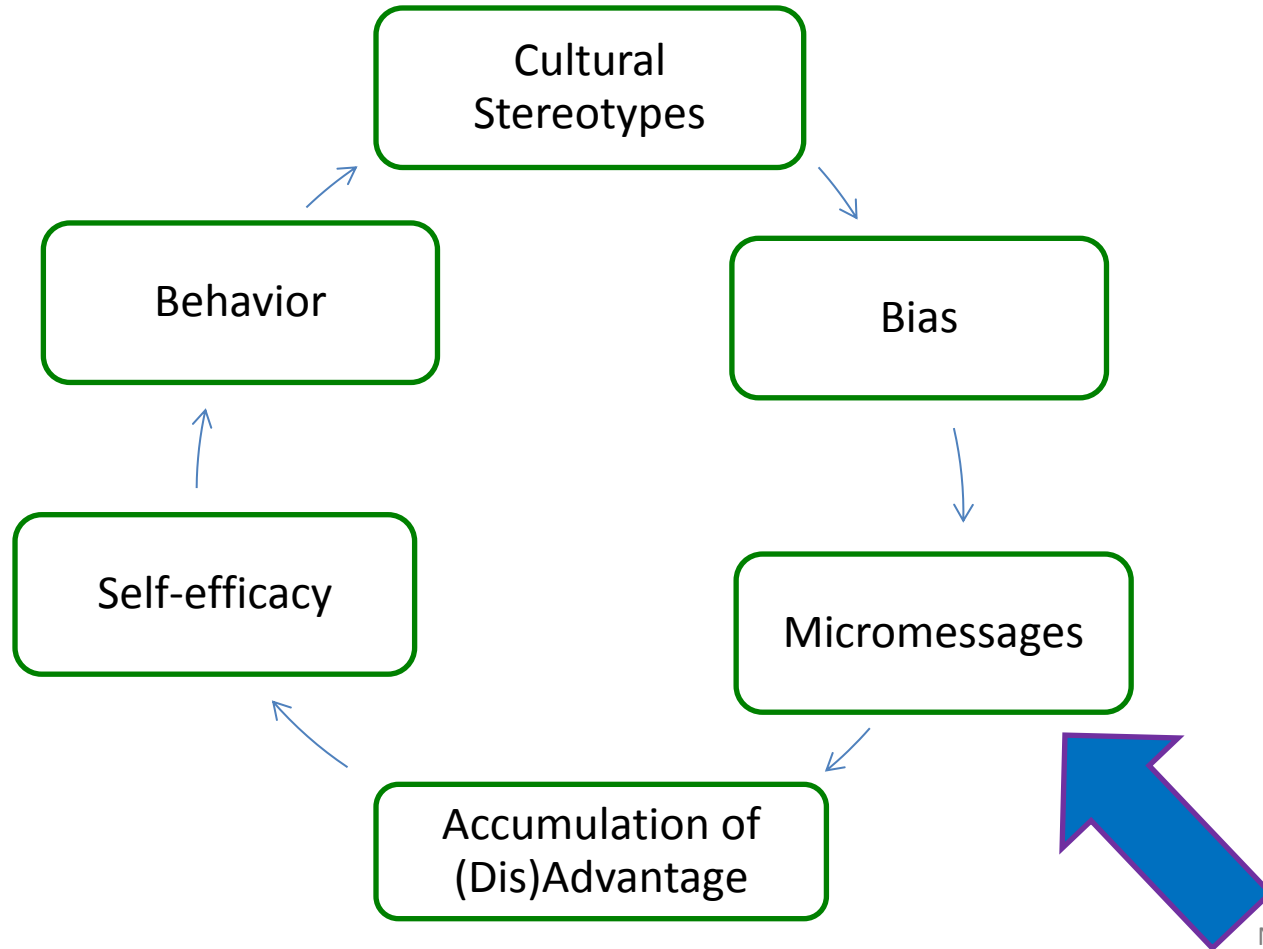
**Guaranteed. Period.®**

e-reader case, \$15, 419654-B43,  
water bottle, \$19, 422617-B44,  
landsend.com





# Micromessages: The Missing Link Between Bias and Behavior





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# Micromessages Accumulate



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# Activity: Examining the Small

Think, pair, share a specific incident when you were being:

- unintentionally discouraged or hurt by something *SMALL* someone said or did
- deeply valued by your colleague or family member in a *SMALL* yet powerful way

How did you know?

What did that person do to communicate your value?



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# Why Think About Micromessaging?

Teacher

Student

Intent

Micromessages

IMPACT

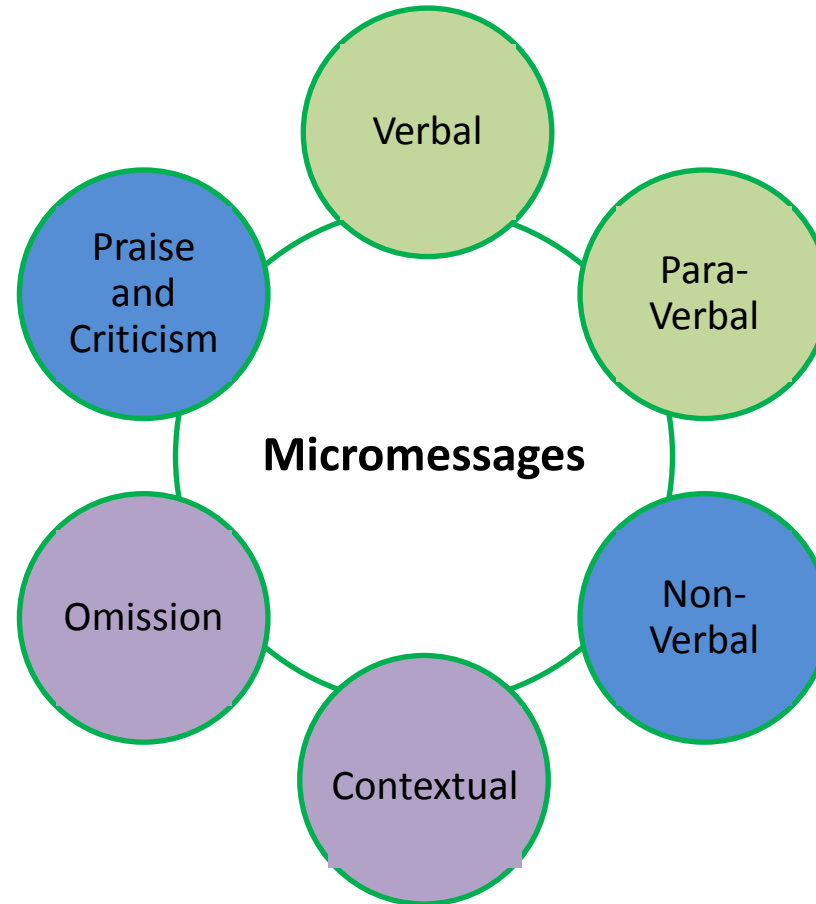
Performance  
& Outcomes

*Impact is more important than Intent!*



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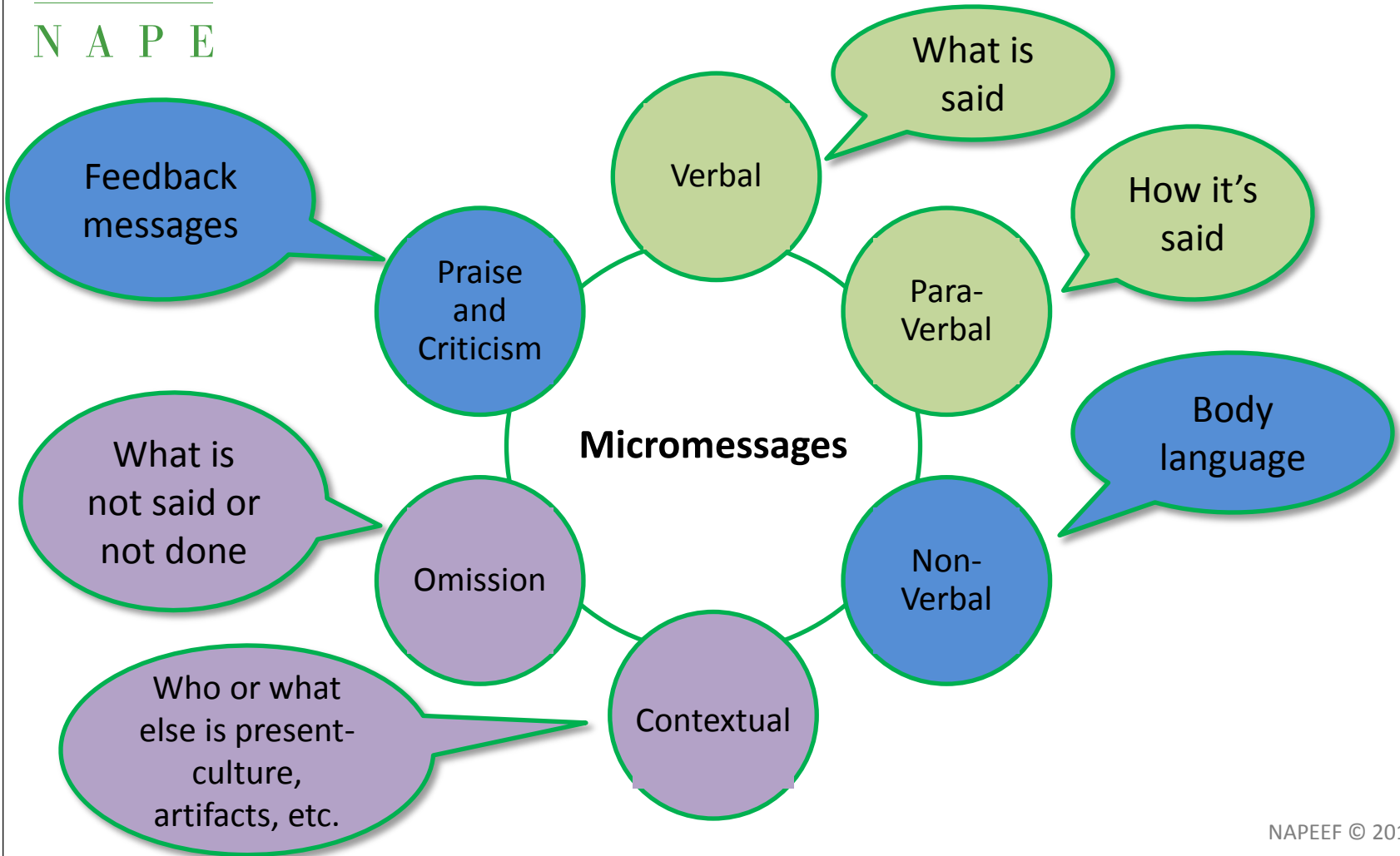
# Key Micromessaging Elements





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# Key Micromessaging Elements





# Activity: Guess the Element

| N A P E | Cue   | Element     |
|---------|---|-------------|
| 1.      | Wait longer for boys' answers than girls' answers                                 | Para-verbal |
| 2.      | Discipline boys more than girls for similar behavior                              | Criticism   |
| 3.      | Avoid eye contact with female/male student; only look at male/female students     | Non-verbal  |
| 4.      | Consistent use of generic "he" or "man" to represent both men and women           | Verbal      |
| 5.      | Only use males as examples of scientists  | Contextual  |
| 6.      | Does not tolerate girls calling out answers but tolerates that behavior from boys | Omission    |

## WORD BANK

Verbal

Omission

Para-verbal

Contextual

Non-verbal

Criticism





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# Indicators of Impact

## Pre-Academy, Post Academy, Post Capstone Perception Ratings – Cohort 1 and 2

| N= 57  | Overall P-Value | Pre Academy (1) | Post Academy (2) | Post Capstone (3) | Post hoc comparisons |
|--|-----------------|-----------------|------------------|-------------------|----------------------|
| I am knowledgeable of ways in which I contribute to an environment that encourages all students in my classroom. | <.0001          | 1.94            | 1.98             | 1.27              | 1≠3, 2≠3             |
| I believe that all students can succeed in STEM disciplines.   | .0353           | 2.02            | 1.73             | 1.71              | 1≠2*, 1≠3*           |
| I would advise my students to take as many STEM courses as they can.   | .0018           | 1.77            | 1.82             | 1.40              | 1≠3, 2≠3             |
| I understand ways in which the classroom environment does or does not encourage all students.                    | <.0001          | 2.02            | 1.94             | 1.34              | 1≠3, 2≠3             |

## Pre-Academy, Post Academy, Post Capstone Perception Ratings – Cohort 1 and 2

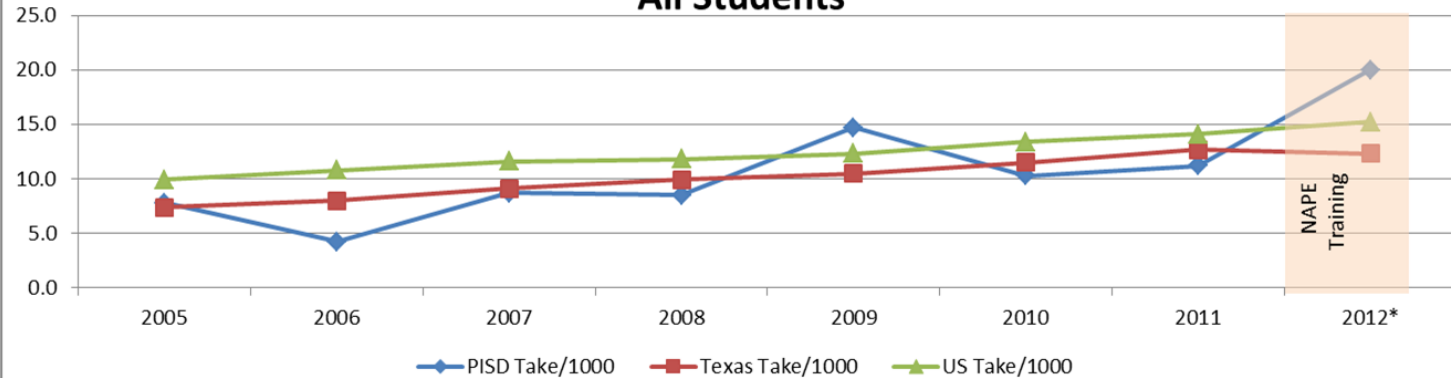
|   |        |      |      |      |                |
|---|--------|------|------|------|----------------|
| I am aware that I am responsible for creating an equitable classroom.                         | <.0001 | 1.81 | 1.76 | 1.18 | 1≠3, 2≠3       |
| I am knowledgeable about methods to decrease micro-inequities in the classroom.               | <.0001 | 2.38 | 2.04 | 1.44 | 1≠2, 1≠3, 2≠3  |
| I am knowledgeable about strategies to evaluate the effectiveness of classroom interventions. | <.0001 | 2.21 | 1.90 | 1.37 | 1≠2, 1≠3, 2≠3* |
| I feel confident in my ability to identify and address micro-inequities in my classroom.      | <.0001 | 2.30 | 2.02 | 1.55 | 1≠2, 1≠3, 2≠3  |
| I am comfortable with evaluating the effectiveness of my classroom interventions.             | <.0001 | 2.23 | 1.92 | 1.47 | 1≠2, 1≠3, 2≠3  |



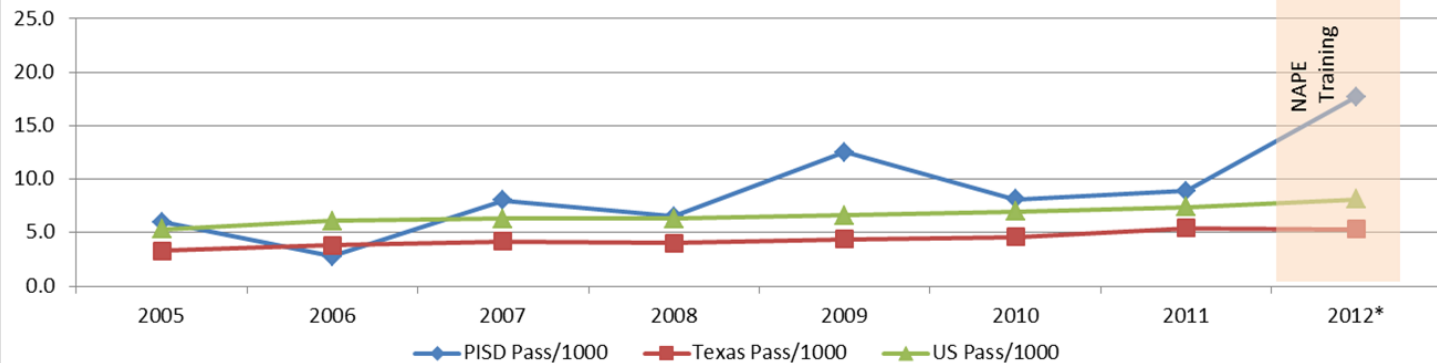
## NAPE Teacher Training in Plano ISD- Comparative AP Chemistry Performance

N

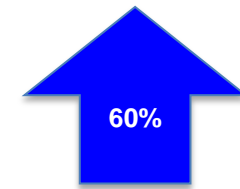
### AP Chemistry- Taking per 1000 Jr & Sr Enrolled All Students



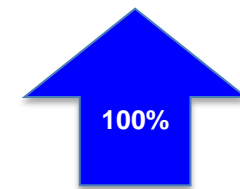
### AP Chemistry- Passing per 1000 Jr & Sr Enrolled All Students



# Plano ISD - Student AP Performance by Gender



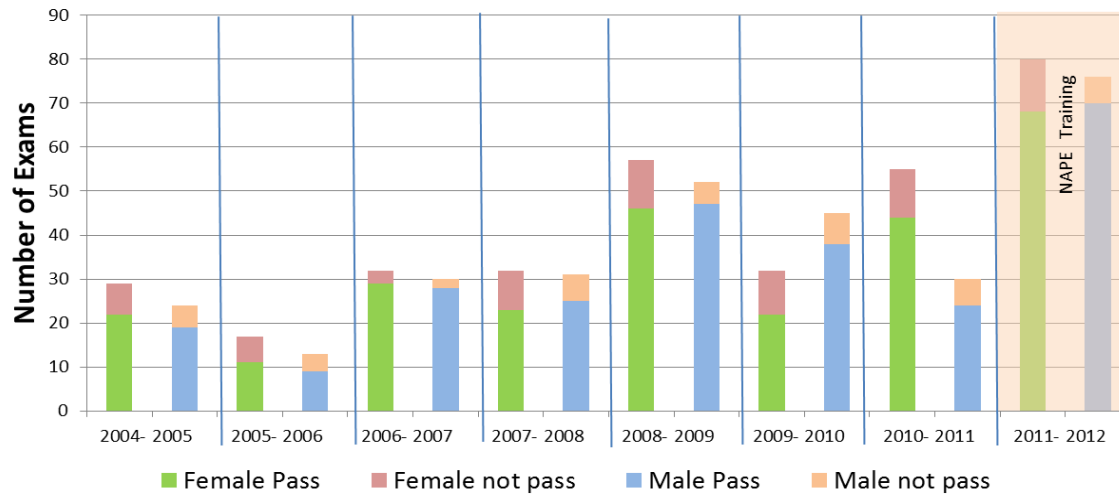
Number of females passing increased 60%



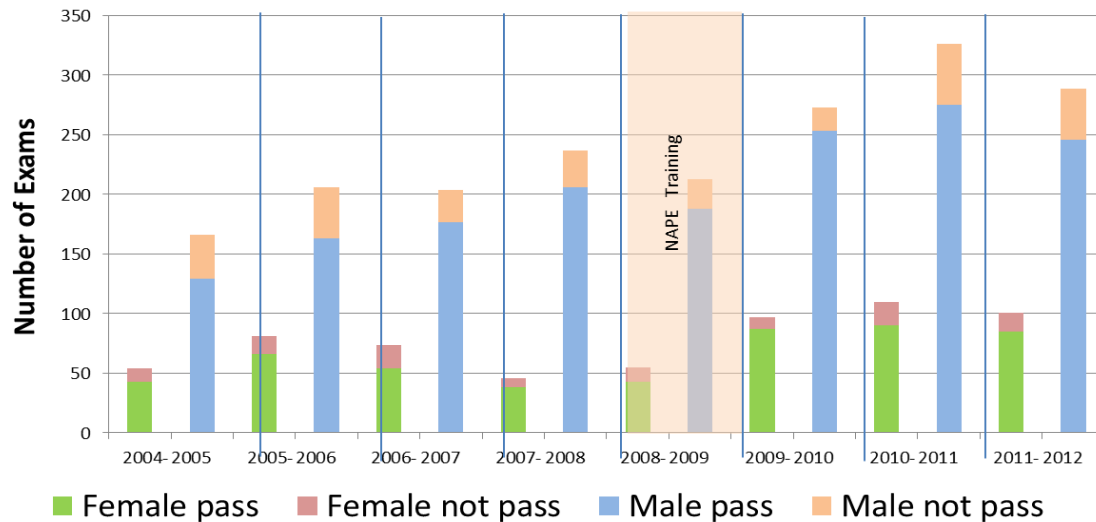
Number of females passing doubled

Attachment 2d NAPEEF © 2014

### PISD AP Chemistry Results by Gender



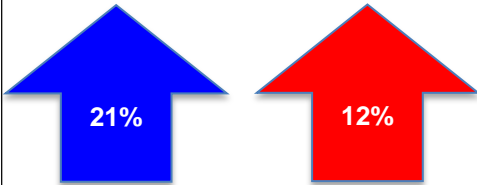
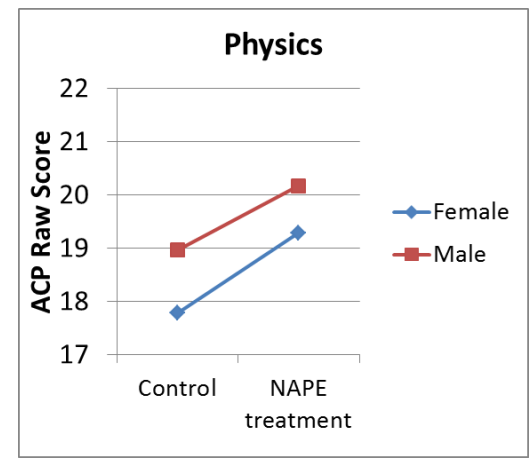
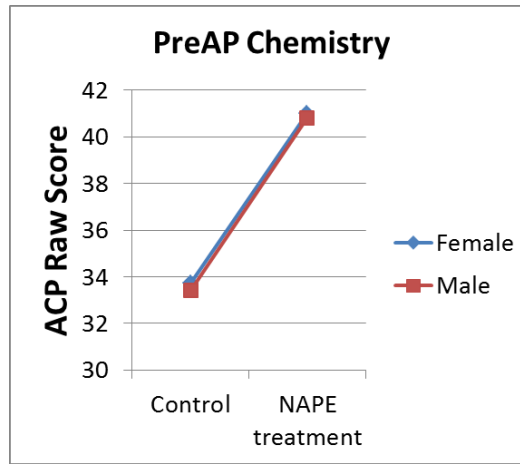
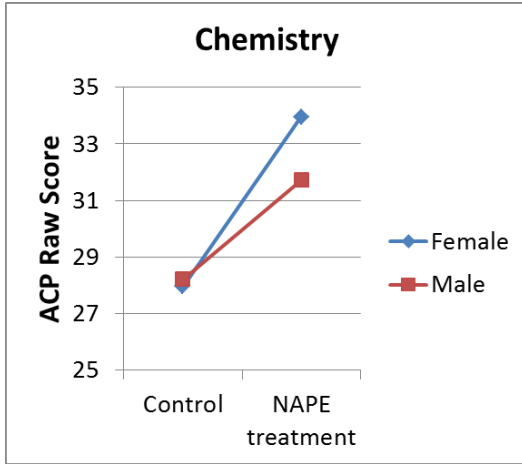
### PISD AP Physics Results by Gender





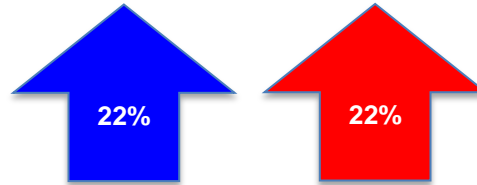
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# Dallas ISD: Student End-of-Course Performance

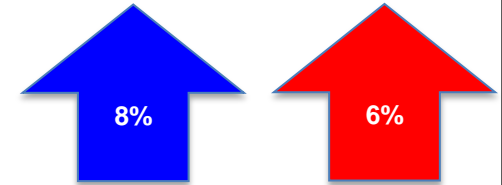


All students of NAPE trained teachers performed significantly better

Girls of NAPE trained teachers improved significantly more than boys.



All students of NAPE trained teachers performed significantly better



All students of NAPE trained teachers performed significantly better



# Impact of Micromessaging Training

*After cleaning the data and clarifying all possible alternative explanations, I find no evidence to explain the positive results other than the NAPE training.”*

Source: Michael Dryden, Ph.D.  
Independent Evaluator



# Super Strategies



- Create a new awareness of micromessages in the classroom and on the campus through discussion with peers, colleagues, and students.
- Evaluate your pedagogy and instructional practices for micromessages using peer observations, student surveys, and climate surveys.
- Take a look at the different ways that the messages in your classroom are conveyed.
- Reflect on the power of micromessages in your life.
- Be cognizant of “little issues;” don’t allow them to damage relationships. Speak and spell a person’s name correctly, make eye contact when conversing, and always be friendly and attentive. All of these are simple tasks that go a long way in fostering an atmosphere of fairness.



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# Implicit Bias

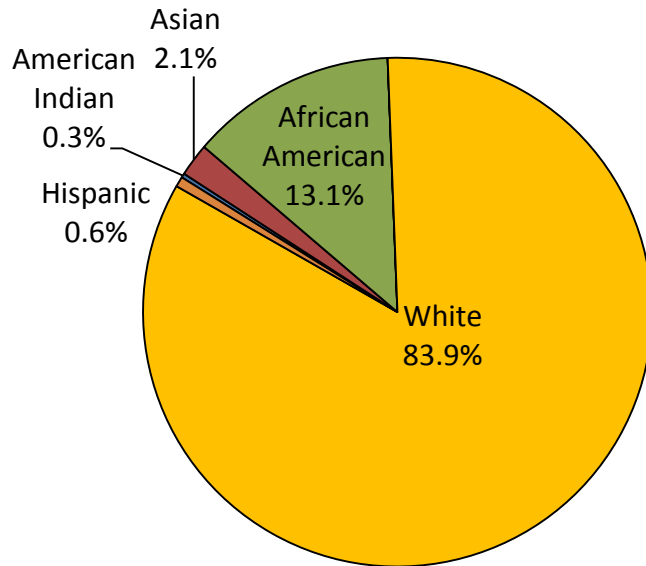




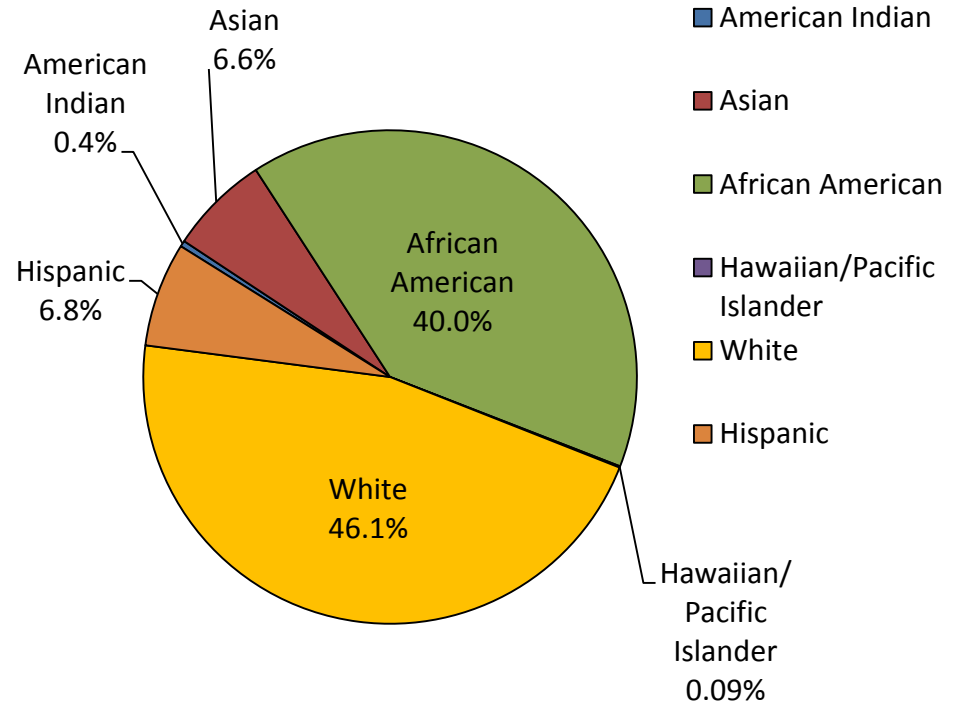
# BCPS Enrollment Trends by Race

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## 1982 BCPS Students by Race



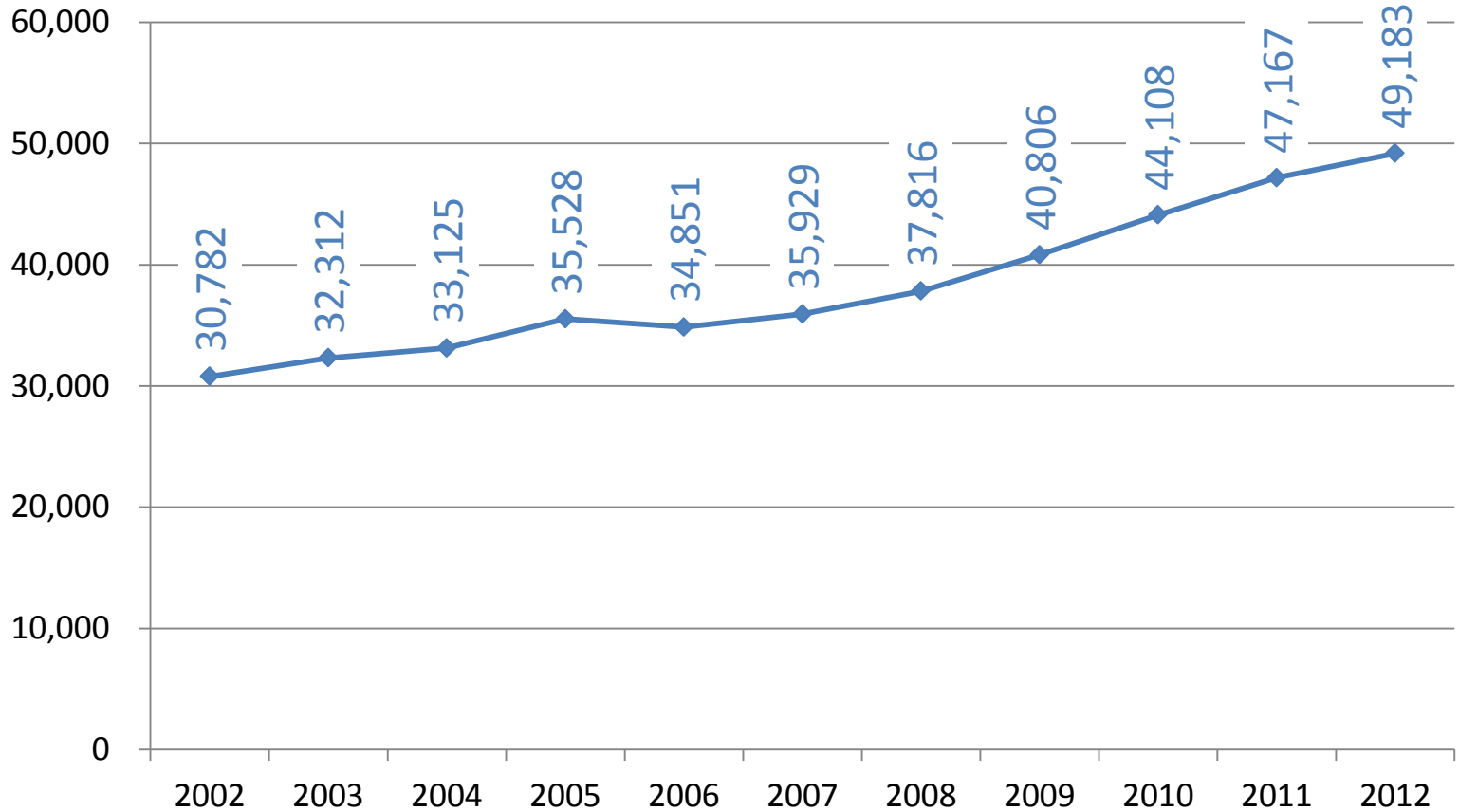
## 2012 BCPS Students by Race





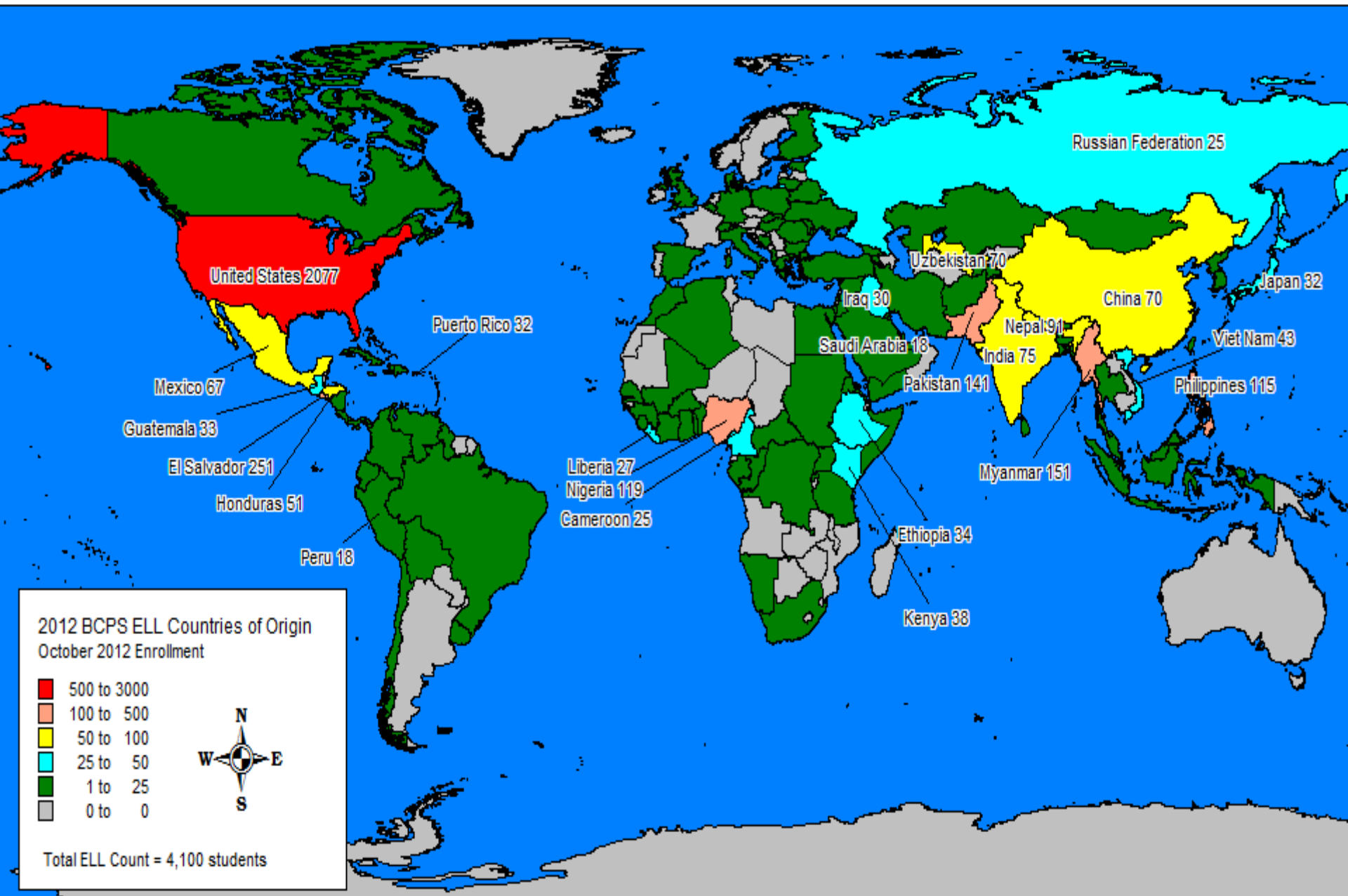
# Free and Reduced Meals (FARMS) Trends

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# Baltimore County Public Schools English Language Learner (ELL) Countries of Origin, October 2012





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# Turn and Chat

**What is cultural  
competence to  
you?**

**What is equity  
in education to  
you?**

**How do these ideas  
relate to STEM/CTE  
in K-12?**



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# Cultural Competence is...

...the knowledge, skills, and disposition that enables an educator to use cultural information to effectively communicate to impact the learning for every student.



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# Unconscious (or Implicit) Bias

Social stereotypes that we form outside of our own consciousness:



Stem from our brain's adaptations



Create unconscious barriers in the classroom



Impact how we relate to people



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# Effects of Unconscious Bias

influence how we reach decisions from our gathering, sorting, and filtering of information

influence our evaluations of people and their value



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# Physicist - the usual suspects

Someone in this lineup is a physicist...can you tell which one?



*Adapted from Women in Science, Engineering and Technology Initiative presentation by E. Haines and A. Maguire*

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# Physicist - the usual suspects

98% of the public couldn't tell which of these people is a physicist...did you get it right?



Adapted from Women in Science, Engineering and Technology Initiative presentation by E. Haines and A. Maguire

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## Activity: Making the Unconscious Conscious

Recall the small things you identified in the “Examining the Small” activity as you respond to these prompts:

1. How could the small things shared that **encourage** or **discourage** us **impact recruitment and retention** in CTE?
2. Has a **student ever shared with you anything** that meant a great deal to her/him and that **surprised you**? Was it **encouraging or discouraging for the student**? Did it **change** the way you **treated** the student?



# Unconscious Gender Bias: Power and Impact

- 360 College Students (1:1 gender split) rated academic articles in politics, psychology of women, or education
- Two names reoccurred but for identical work: John T. McKay or Joan T. McKay

Study

Question

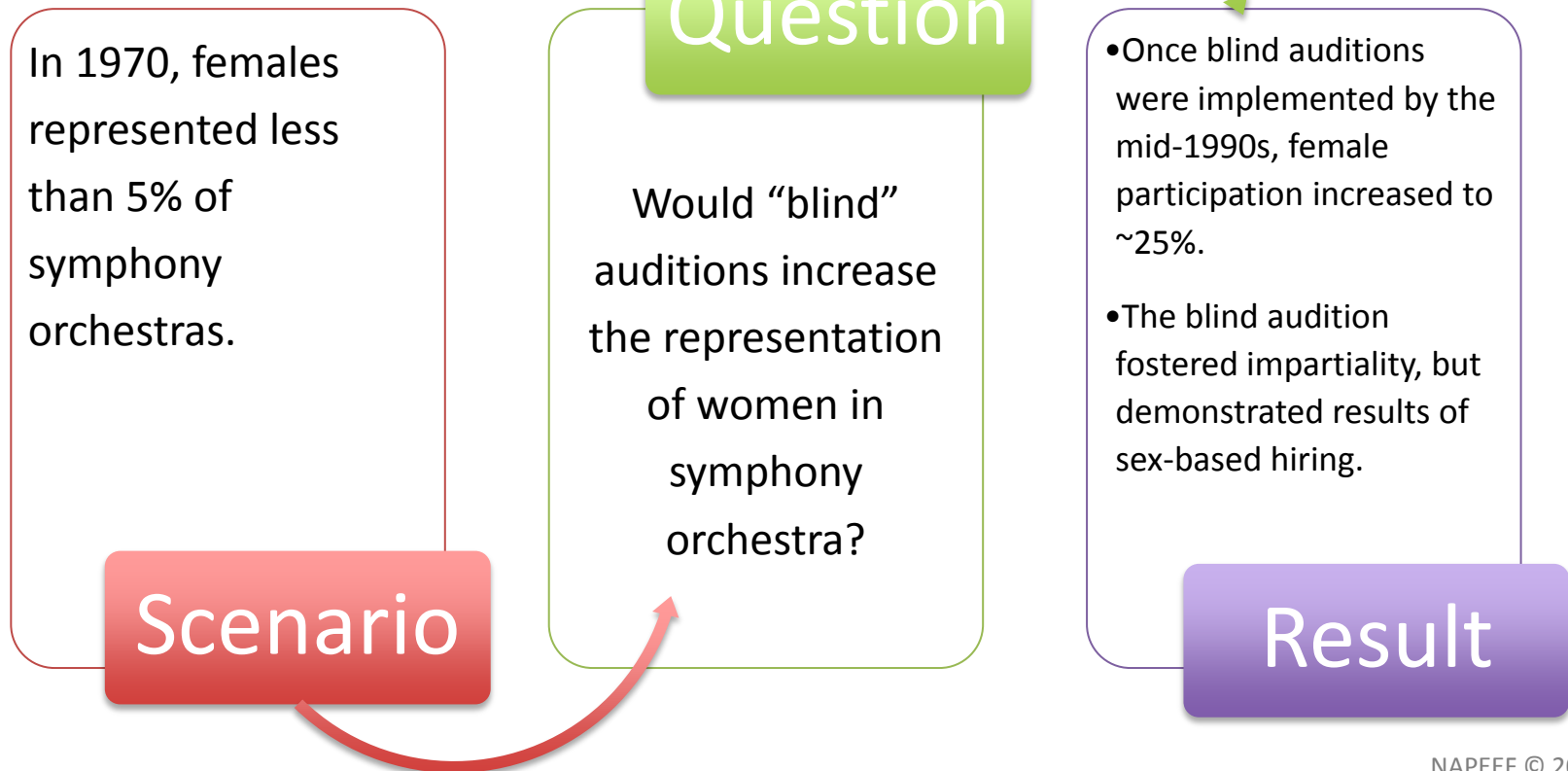
With identical work, should there be any difference in how the students rate John vs. Joan?

- Out of 5 possible points, *John* scored a **FULL POINT** **HIGHER** than *Joan*.
- There was consistent gender bias in favor of a male as an author of academic work.

Result



# Unconscious Gender Bias: Power and Impact





# Unconscious Gender Bias: Power and Impact

National study of a psychology faculty candidate. 238 current faculty members (50:50 ratio) evaluated the same resume with male or female name

Scenario

Question

With identical resumes, should there be any difference in how the faculty vote to hire Ruth vs. Robert?

- 45% voted to hire "Ruth," but 70% vote to hire "Robert." Male and female evaluators equally preferred the male candidate.
- Yet another example of bias influencing sex-based hiring.

Result



# Activity: Unconscious Gender Bias: Implicit Association Test



**Project Implicit**

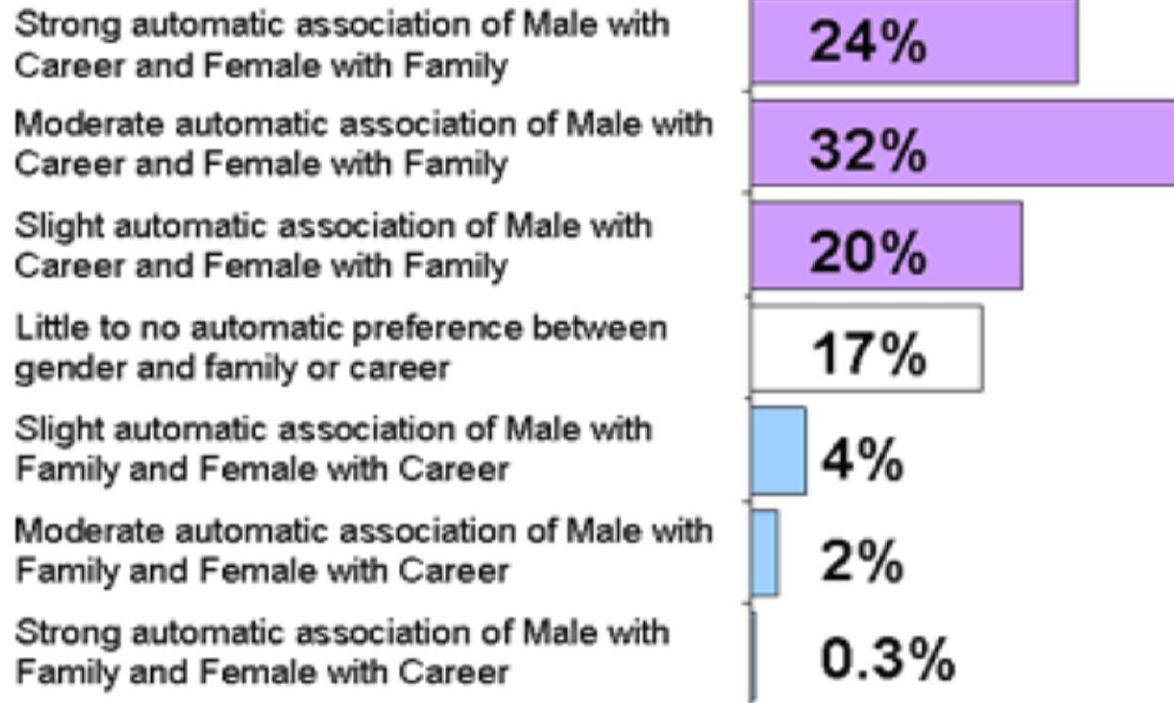
<https://implicit.harvard.edu/implicit/>



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# Activity: IAT Results

Percent of web respondents with each score



[Click for detailed summary](#)



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# Peer Observation Toolkit







# Super Strategies



- Become aware of your own unconscious biases through observing peers, asking your students, and videotaping your class.
- Take the implicit bias test at:  
<https://implicit.harvard.edu/implicit/demo/>
- Create an awareness of gender-biased behaviors with regard to STEM occupations and preparation.
- Directly address and discuss implicit bias in STEM careers.
- Minimize bias in assessments.



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# Micro-Inequities



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Bias = Micro-Inequities

Unconscious

Unintentional

**POWERFUL**

**PERVASIVE**

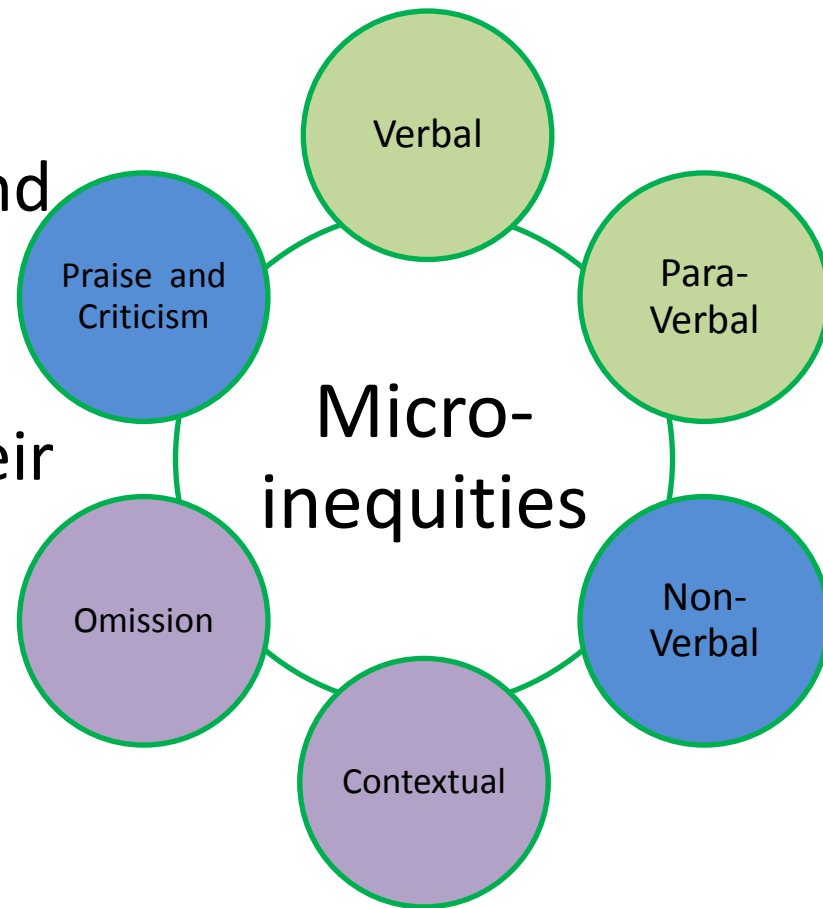
Subtle



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# Activity: Recognizing Your Cues

1. Match the cues and messages.
2. Sort them into their categories





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# Activity: You Rock!

Inoculate  
against  
micro-  
inequities



Increase  
micro-  
affirmations



# Super Strategies



- Practice recognizing and interrupting a micro-inequity in class.
- Consider that different populations perceive micro-inequities differently and that not all things mean the same to all people.
- Ward off subconscious micro-inequities by sending micro-affirmations. Focus on the strengths of the individual to filter potentially damaging comments or behaviors.
- Don't let micro-inequities go unnoticed. Find a way to acknowledge the occurrence, and address it in a positive way.
- Model behaviors that redirect micro-inequities to micro-affirmations.



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# Micro-Affirmations



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# Positive Micromessages

Micro-affirmations are micromessages we send that validate and recognize other people in positive and supportive ways.



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# Activity: Changing Micromessages in Your Classroom

How can you change the micromessages in your classroom today?

1. List examples
2. Share with a partner
3. Share with the group





# Impact of Micro-Affirmations on Girls in Nontraditional Courses

- Increased their willingness to take risks
- Enhanced creativity and innovation
- Increased levels of engagement in complex tasks and open-ended thinking
- Improved caring about learning
- Increased interest in non-trad. field and development of students' self-efficacy





# Micromessaging: Changing the Learning Narrative

## Dynamic-Learning Frame

- Ability to learn is a mental process.
- Knowledge is growing and changing.
- When faced with a misbehavior, forgive and educate.
- *Feel “smart”* when taking on a challenge or helping others.
- Engage disagreement in the learning process.

## Fixed-Performance Frame

- Ability to learn is fixed trait.
- Knowledge is stable, a collection of facts, and everyone agrees with it.
- When faced with a misbehavior, invoke punishment.
- *Feel “smart”* when outperforming others.
- Confront disagreement and put student down.

Source: Johnson, P.H. 2012. *Opening Minds: Using Language to Change Lives*. Stenhouse Publishers.



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## Activity: Scenario/Role Play

*Carolann: “I am no good at algebra. No one in my family is good at math. I don’t like math, and let’s face it, girls are stupid at math, so why should I try?”*



# Super Strategies



- Learn to provide micromessages that support student self-efficacy.
- Plan to affirm every student, and ensure others are affirming as well.
- Create a culture of affirmation in your class by not tolerating negative comments and practicing affirmations to create energy and acceptance among your students—You rock!
- Be intentional—there is a moment before you react that you can be more thoughtful in your response. Will you be affirmative in your message?
- Practice micro-affirmations, and measure each small impact through student outcomes. Remember that change takes:
  - Time: a year or more!
  - Effort: a conscious plan!
  - Support: of your peers and a learning community!
- Before teaching a new concept, have your students reflect on a positive experience they had while learning something new as a way to affirm their ability to learn.



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# Wrap-up

# Goal

Apply knowledge of implicit bias and micromessaging to create strategies that improve access and equity for every student.





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# Objectives

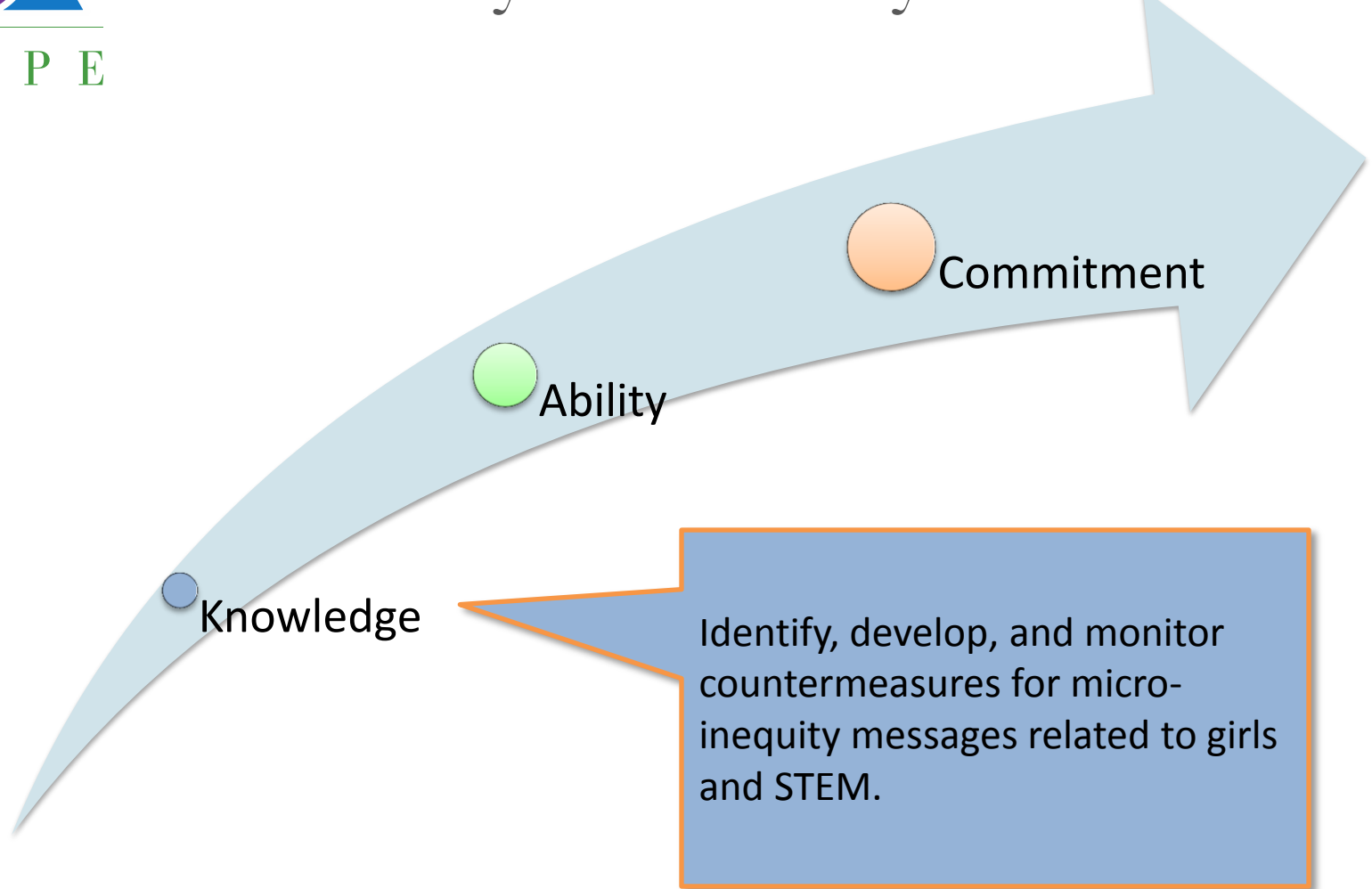
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- Become aware of negative biases that affect our communications
- Create action plans to minimize micro-inequities and maximize micro-affirmations





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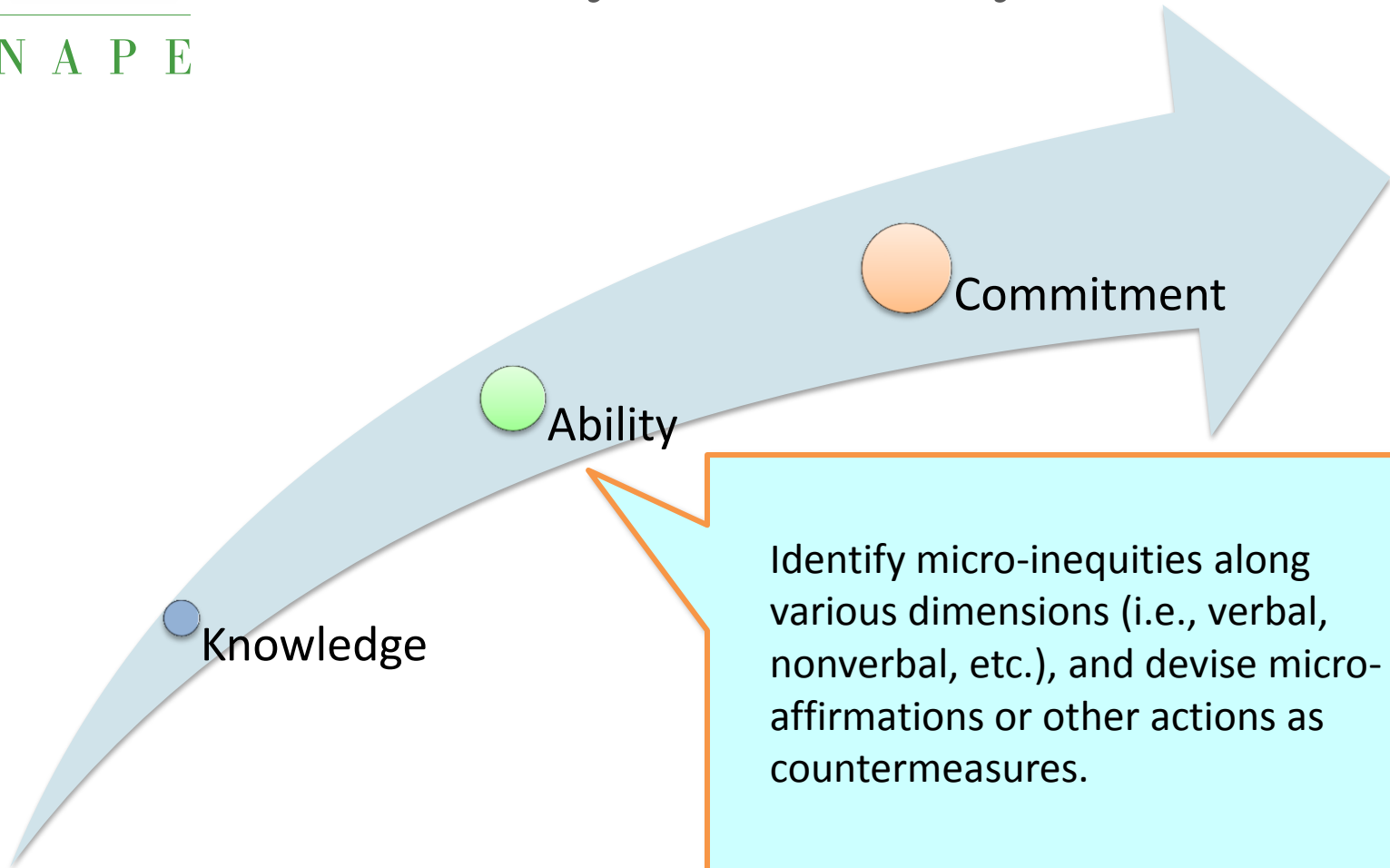
# Key Takeaway Points





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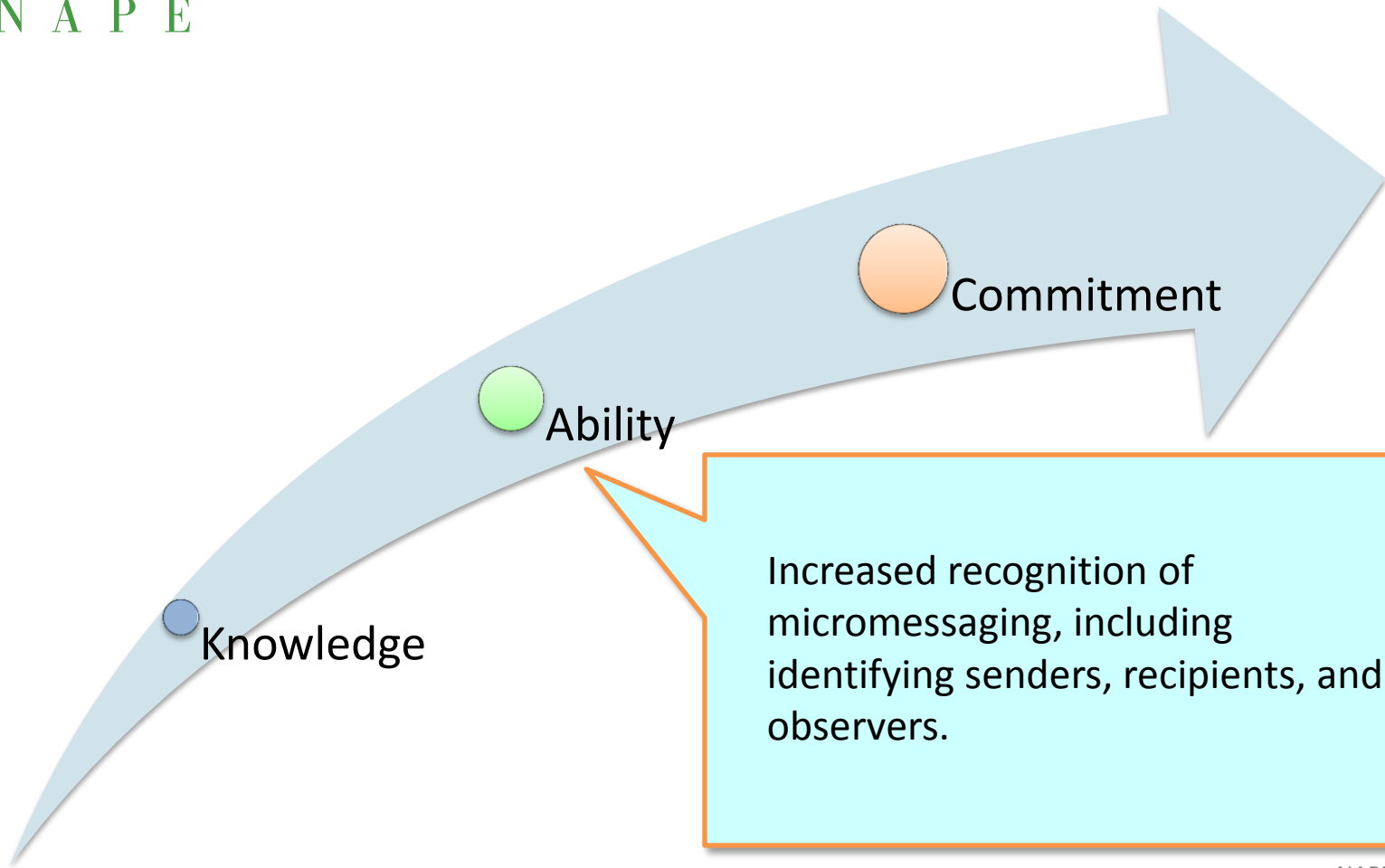
# Key Takeaway Points





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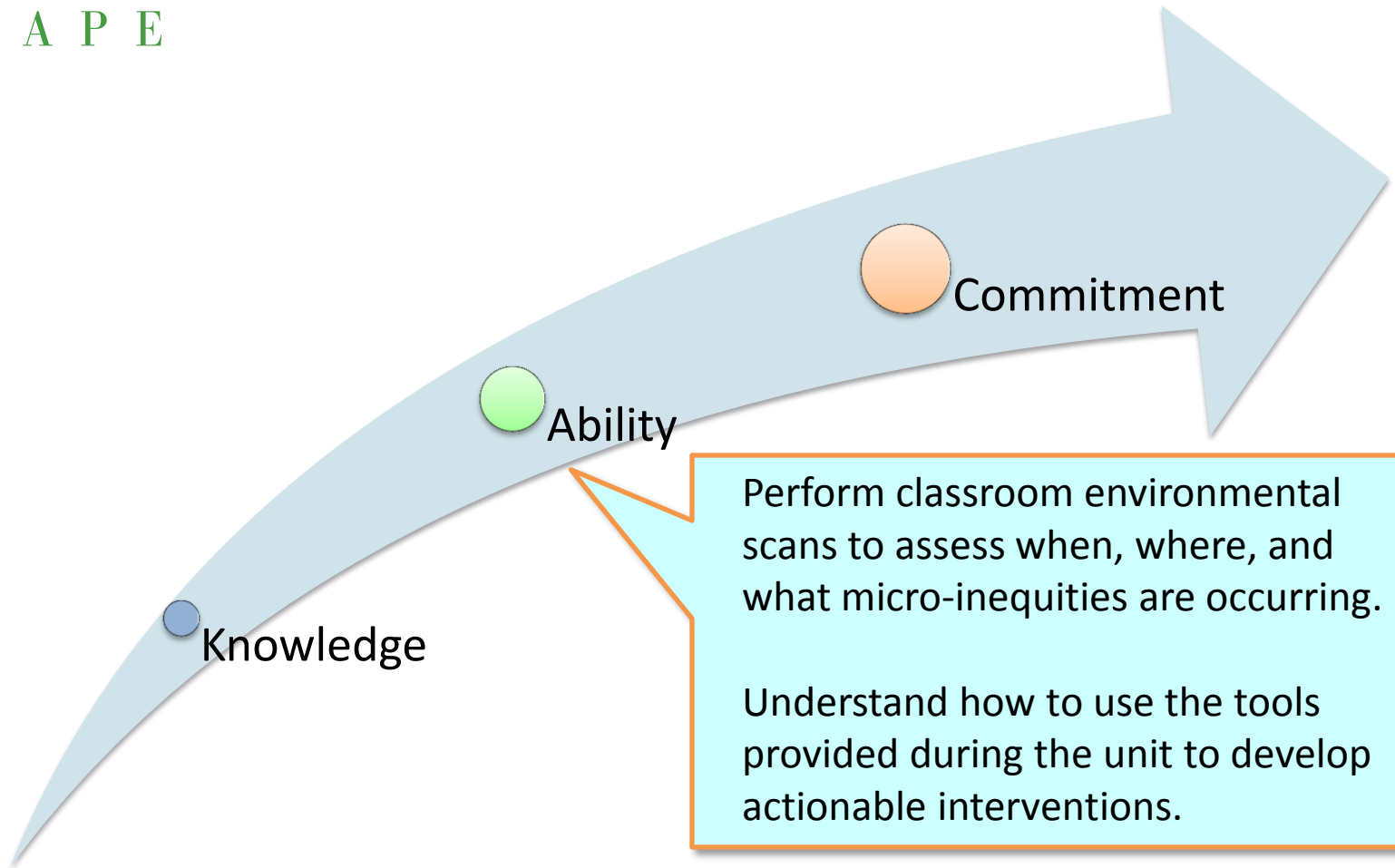
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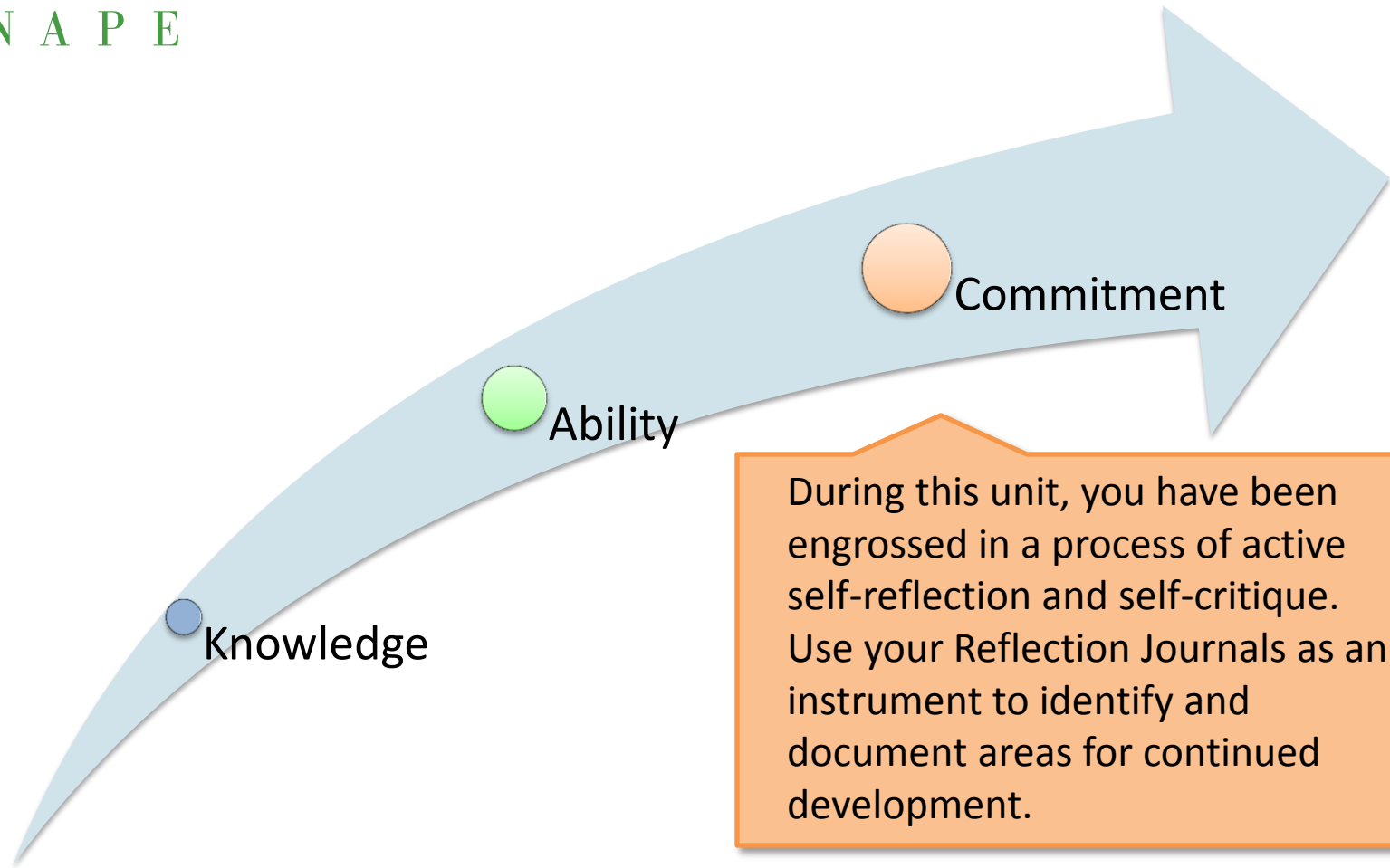


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# Key Takeaway Points

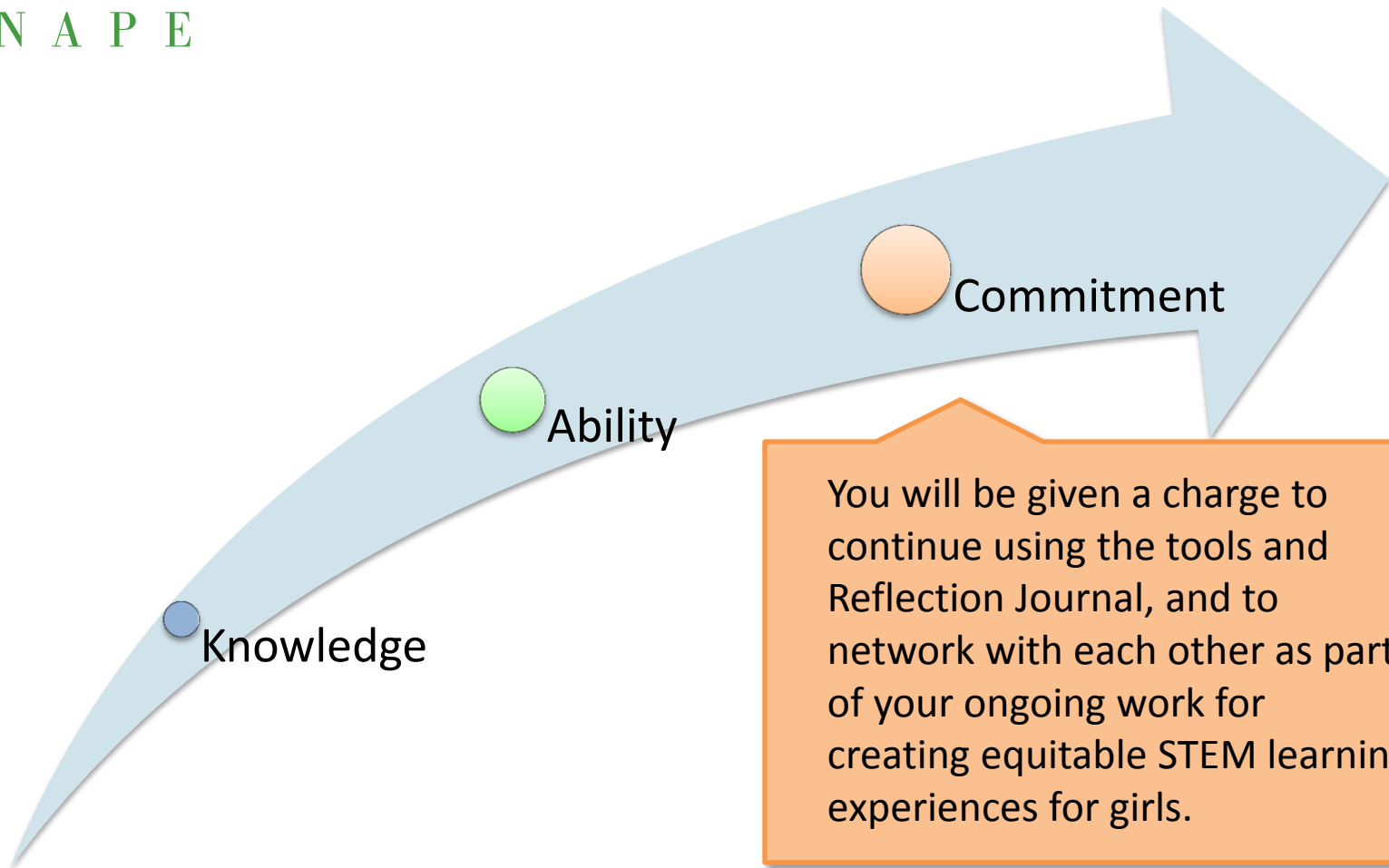


During this unit, you have been engrossed in a process of active self-reflection and self-critique. Use your Reflection Journals as an instrument to identify and document areas for continued development.



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# Key Takeaway Points



You will be given a charge to continue using the tools and Reflection Journal, and to network with each other as part of your ongoing work for creating equitable STEM learning experiences for girls.



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# Moving Forward

- Continue to reflect on micromessages
- Send micro-affirmations to your students
- Conduct a peer-to-peer observation
- Try the Implicit Association Test:  
[implicit.harvard.edu](http://implicit.harvard.edu)



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# Moving Forward

- Use your Reflection Journal.
- Send micro-affirmations to your students.
- Conduct a peer-to-peer observation.
- Try the Implicit Association Test:  
<https://implicit.harvard.edu/implicit/>





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“All great achievements  
require time.” —Maya Angelou



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