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

Illinois State Department of Education
August 8, 2014
Claudia Morrell
## Agenda

<table>
<thead>
<tr>
<th>Topic</th>
<th>Approximate Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micromessages: Introduction Implicit Bias and</td>
<td>60 minutes</td>
</tr>
<tr>
<td>Micro-inequities and Micro-affirmations</td>
<td>75 minutes</td>
</tr>
<tr>
<td>Micromessages in Action: Pipe Process</td>
<td>60 minutes</td>
</tr>
<tr>
<td>Wrap-up</td>
<td>45 minutes</td>
</tr>
</tbody>
</table>
Goal

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

Cultural Stereotypes

Behavior

Self-efficacy

Bias

Micromessages

Accumulation of (Dis)Advantage
Micromessages Accumulate
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?
Why Think About Micromessaging?

Impact is more important than Intent!
Key Micromessaging Elements

Micromessages

- Verbal
- Para-Verbal
- Non-Verbal
- Contextual
- Omission
- Praise and Criticism
Key Micromessaging Elements

- Feedback messages
- What is not said or not done
- Who or what else is present - culture, artifacts, etc.
- Praise and Criticism
- Omission
- Contextual
- Verbal
- Para-Verbal
- Non-Verbal
- Body language

What is said
How it’s said
### Activity: Guess the Element

<table>
<thead>
<tr>
<th></th>
<th>Cue</th>
<th>Element</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Wait longer for boys’ answers than girls’ answers</td>
<td>Para-verbal</td>
</tr>
<tr>
<td>2</td>
<td>Discipline boys more than girls for similar behavior</td>
<td>Criticism</td>
</tr>
<tr>
<td>3</td>
<td>Avoid eye contact with female/male student; only look at male/female students</td>
<td>Non-verbal</td>
</tr>
<tr>
<td>4</td>
<td>Consistent use of generic “he” or “man” to represent both men and women</td>
<td>Verbal</td>
</tr>
<tr>
<td>5</td>
<td>Only use males as examples of scientists</td>
<td>Contextual</td>
</tr>
<tr>
<td>6</td>
<td>Does not tolerate girls calling out answers but tolerates that behavior from boys</td>
<td>Omission</td>
</tr>
</tbody>
</table>

**WORD BANK**

- Verbal
- Omission
- Para-verbal
- Contextual
- Non-verbal
- Criticism
## Indicators of Impact

<table>
<thead>
<tr>
<th>Pre-Academy, Post Academy, Post Capstone Perception Ratings – Cohort 1 and 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>N= 57</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>I am knowledgeable of ways in which I contribute to an environment that encourages all students in my classroom.</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Overall P-Value</td>
</tr>
<tr>
<td>&lt;.0001</td>
</tr>
</tbody>
</table>

| **I believe that all students can succeed in STEM disciplines.** |
|                                                                           |
| Overall P-Value | Pre Academy (1) | Post Academy (2) | Post Capstone (3) | Post hoc comparisons |
| .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.** |
|                                                                           |
| Overall P-Value | Pre Academy (1) | Post Academy (2) | Post Capstone (3) | Post hoc comparisons |
| .0018 | 1.77 | 1.82 | 1.40 | 1≠3, 2≠3 |

<p>| <strong>I understand ways in which the classroom environment does or does not encourage all students.</strong> |
|                                                                           |
| Overall P-Value | Pre Academy (1) | Post Academy (2) | Post Capstone (3) | Post hoc comparisons |
| &lt;.0001 | 2.02 | 1.94 | 1.34 | 1≠3, 2≠3 |</p>
<table>
<thead>
<tr>
<th>Pre-Academy, Post Academy, Post Capstone Perception Ratings – Cohort 1 and 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I am aware that I am responsible for creating an equitable classroom.</strong></td>
</tr>
<tr>
<td><strong>I am knowledgeable about methods to decrease micro-inequities in the classroom.</strong></td>
</tr>
<tr>
<td><strong>I am knowledgeable about strategies to evaluate the effectiveness of classroom interventions.</strong></td>
</tr>
<tr>
<td><strong>I feel confident in my ability to identify and address micro-inequities in my classroom.</strong></td>
</tr>
<tr>
<td><strong>I am comfortable with evaluating the effectiveness of my classroom interventions.</strong></td>
</tr>
</tbody>
</table>
NAPE Teacher Training in Plano ISD - Comparative AP Chemistry Performance

**AP Chemistry - Taking per 1000 Jr & Sr Enrolled**

**All Students**

- PISD Take/1000
- Texas Take/1000
- US Take/1000

**AP Chemistry - Passing per 1000 Jr & Sr Enrolled**

**All Students**

- PISD Pass/1000
- Texas Pass/1000
- US Pass/1000
Plano ISD - Student AP Performance by Gender

- Number of females passing increased 60%
- Number of females passing doubled

Attachment 2d
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.

21% 12% 22% 22% 8% 6%

NAPEEF © 2014
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
• 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.
Implicit Bias
BCPS Enrollment Trends by Race

1982 BCPS Students by Race

- White: 83.9%
- African American: 13.1%
- Hispanic: 0.6%
- Asian: 2.1%
- American Indian: 0.3%

2012 BCPS Students by Race

- White: 46.1%
- African American: 40.0%
- Hispanic: 6.8%
- Asian: 6.6%
- American Indian: 0.4%
- Hawaiian/Pacific Islander: 0.09%
Free and Reduced Meals (FARMS) Trends

Source: COGNOS, Office of Food and Nutrition 2012 FARMS Report
Baltimore County Public Schools English Language Learner (ELL) Countries of Origin, October 2012

2012 BCPS ELL Countries of Origin
October 2012 Enrollment

- United States 2077
- Mexico 67
- Guatemala 33
- El Salvador 251
- Honduras 51
- Peru 18
- Puerto Rico 32
- Saudi Arabia 18
- Liberia 27
- Nigeria 119
- Cameroon 25
- Ethiopia 34
- Kenya 33
- China 70
- Japan 32
- Viet Nam 43
- Philippines 115
- Russian Federation 25
- Uzbekistan 70
- India 75
- Nepal 94
- Pakistan 141
- Myanmar 151

Total ELL Count = 4,100 students
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?
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.
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
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.
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
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
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

**Study**
- 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

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

**Result**
- 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.
In 1970, females represented less than 5% of symphony orchestras.

**Question**

Would “blind” auditions increase the representation of women in symphony orchestra?

**Scenario**

- Once blind auditions were implemented by the mid-1990s, female participation increased to ~25%.
- The blind audition fostered impartiality, but demonstrated results of sex-based hiring.

**Result**
Unconscious Gender Bias: Power and Impact

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

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

Result
• 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.
Activity: Unconscious Gender Bias: Implicit Association Test

Project Implicit
https://implicit.harvard.edu/implicit/
Activity: IAT Results

Percent of web respondents with each score

- Strong automatic association of Male with Career and Female with Family: 24%
- Moderate automatic association of Male with Career and Female with Family: 32%
- Slight automatic association of Male with Career and Female with Family: 20%
- Little to no automatic preference between gender and family or career: 17%
- Slight automatic association of Male with Family and Female with Career: 4%
- Moderate automatic association of Male with Family and Female with Career: 2%
- Strong automatic association of Male with Family and Female with Career: 0.3%

Click for detailed summary
Peer Observation Toolkit

Observe
Assess
Suggest
• 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.
Micro-Inequities
Bias = Micro-Inequities

Unconscious
Unintentional
POWERFUL
PERVASIVE
Subtle
Activity: Recognizing Your Cues

1. Match the cues and messages.

2. Sort them into their categories

- Verbal
- Para-Verbal
- Non-Verbal
- Omission
- Contextual
- Praise and Criticism

Micro-inequities
Activity: You Rock!

Inoculate against micro-inequities

Increase micro-affirmations
• 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.
Micro-Affirmations
Positive Micromessages

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

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?”
• 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.
Wrap-up
Goal

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

Identify, develop, and monitor countermeasures for micro-inequity messages related to girls and STEM.
Key Takeaway Points

Identify micro-inequities along various dimensions (i.e., verbal, nonverbal, etc.), and devise micro-affirmations or other actions as countermeasures.
Key Takeaway Points

Increased recognition of micromessaging, including identifying senders, recipients, and observers.
Perform classroom environmental scans to assess when, where, and what micro-inequities are occurring.

Understand how to use the tools provided during the unit to develop actionable interventions.
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.
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.
• 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
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/
“All great achievements require time.” — Maya Angelou