



Hello, welcome to the Joint Special Populations Advisory Committee's E-Seminar on the Internal Barriers that may affect student success. Over the next 15 minutes or so, we will identify some of these barriers and talk about the ways they can be addressed. We will look at the ways we communicate with one another; the ways we interpret success, failure, and emotions; as well as the impact bias and stereotype has upon academic and employment success and what we can do about it.

Since the 1960's equity and access has been a part of all educational policy and CTE legislation. This has resulted in some success. In large part, pictures of Caucasian female nurses in white uniforms have been replaced with posters of both men and women of all ethnicities in scrubs. The pictures of scantily dressed women draped over the hoods of cars are all but removed from mechanics shops on campuses across America.



The [Americans with Disabilities Act](#), [Title IX](#), and other legislation has raised our awareness, convincing us that women can and men do enter into jobs that for generations were gender and racially stereotyped. However, we still find a vast divide between the careers women and students of color are entering, as well as the salaries they are being paid and the opportunities they are offered when compared to the careers and opportunities of men, particularly Caucasian men.



www.titleix.info

So, if we've addressed the "low-hanging fruit" of inequality, and yet inequity still persists, what is left to do? What are we missing? There is a growing body of research that indicates that it isn't the obvious discrimination keeping equity from taking root in schools and businesses. There is evidence that a powerful sense of our own biases and those of other educators, employers, students, parents, and administrators are also at play. We were all raised with particular beliefs and values – many of which have changed within our culture. However, as well-intentioned as we are, many of these outdated biases still influence our actions and thoughts while we remain largely unaware of them and, especially, of their impact. Because they reside within us, they are termed Internal Barriers. This e-seminar will focus on some of these internal mind-sets and beliefs that can be barriers to student success.

Let's get started!

Micro-messages – little messages with a big voice!

Our unconscious biases, beliefs, and personal feelings – both positive and negative – are frequently revealed through "Micro-messages." A micro-message is a small behavior or action that can communicate your belief in a student or employee or that you think that they do not belong. All without saying a word!

In 1973, Mary Rowe defined Micro-inequities as, "*apparently small events which are often ephemeral and hard-to-prove, events which are covert, often unintentional, frequently unrecognized by the perpetrator, which occur wherever people are perceived to be 'different.'*"



At the same time she defined micro-affirmations as, *"apparently small acts, which are often ephemeral and hard-to-see, events that are public and private, often unconscious but very effective, which occur wherever people wish to help others to succeed."*

Micro-inequalities and micro-affirmations, together called micro-messages, are ways we communicate our feelings to one another. They go well beyond our words and frequently beyond even our conscious minds. They are referred to as "micro" because they *are* small. However, the impact and consequences they can have may be enormous - and frequently unrecognized. Many times, we are completely unaware of the actual messages sent and, to complicate things further, the message received can be very different than the message we meant to deliver.

However, the message received is more important than the message intended!

The key elements of micro-messages range from the basics of what is directly said, how it's said, and the body language of the speaker to the more subtle elements such as what is not said or done or whom else is in the room (Talking about sensitive topics when other students are in the room is inappropriate)!¹

It's easy to see, but often goes unaddressed, when a speaker doesn't make eye contact with us or the walls are papered solely with pictures of male engineers or female pre-school teachers thus conveying "appropriate" roles for males and females. It's harder to identify when a teacher asks more probing or encouraging questions of male students, or a professor learns all the student's names except the two women in the class. These micro-messages are small and perhaps inconsequential on their own. However, hundreds of messages that convey a lack of belonging or faith in a student or employee can have a profound effect.

Micro-messages can lead to both positive and negative results. Examples of positive micro-messages that encourage students include:

- Asking questions that make a student explore an idea further
- Making eye contact
- Nodding your head when an employee is speaking

Examples of negative micro-messages include:

- Checking your watch when a students or employee is speaking
- Crossing your arms and turning away when having a conversation
- Not stopping your "task at hand" (i.e. grading papers) while a student speaks

¹ <http://www.napequity.org/nape-content/uploads/Pulley-Micromessaging.pdf>



Once made aware of micro-messages in our delivery and actions, we can take the time to stop and identify both micro-inequities and micro-affirmations. With awareness and training or practice it is easy to see how we can use micro-messages to foster success in the classroom as well as on the job.

Our next topic is: **Stereotype Threat** -- Claude Steel and Joshua Aronson define Stereotype Threat as:

"Being at risk of confirming, as self-characteristic, a negative stereotype about one's group."

So, when a woman, who is aware of the stereotype that women "can't do math," takes a math test and the first thing she's asked - typical on a standardized test - is her name and gender, the stereotype is brought to mind and a host of issues may come into play. Instead of focusing on the material in front of her, she may be distracted, have narrowed attention, anxiety, self-consciousness, withdrawal of effort, or even over-effort² because she fears she may confirm the stereotype that women do not perform well in math. The results can be disastrous!



Reducingstereotypethreat.org

Any time a person identifies as a member of a stereotyped group and cares about the outcome of a test, her or his performance may suffer. Stereotype Threat has been shown to have an impact on women when compared to men, Blacks as compared to Whites, Whites to Asians, and on students who are older, disabled, immigrants, members of the LGBT community, as well as on athletes. Its effect has been seen in math, verbal ability, IQ tests, golf, reaction time, memory, language usage, and negotiations. It doesn't matter what the situation is, it only matters that the person cares about the outcome!

Shelly Correll, Director of the Clayman Institute for Gender Research³ at Stanford University, indicates that *career choice particularly in STEM and Nontraditional careers may be impacted by Stereotype Threat*. Research shows that when women are "told that men had higher 'contrast sensitivity' ability. Women, unknowingly having received the same scores as their male counterparts, rated their own aptitude lower, held their performance up to higher standards, and reported lower interest in entering fields requiring skill in 'contrast sensitivity' than men. As the women do not believe they have the skills necessary, this is one way in which women are likely to make a decision to choose a career other than in a high-wage, high-demand STEM field.⁴ However, when subjects were told that women and men had the same 'contrast sensitivity' ability, these disparities disappeared and there were no gender differences in ratings of aptitude, assessments of competence, or interest in fields requiring 'contrast sensitivity' ability. **This simple correction – being told women and men have similar contrast sensitivity - illustrates the strength of the stereotype threat as well as the ease at which remedies can be applied.**

The website, www.reducingstereotypethreat.org⁵ offers concrete and simple ways to reduce stereotype threat. They include: deemphasizing threatened social identities, encouraging self-affirmation, emphasizing high standards with assurances of capability, providing role models, providing external attributions for difficulty, and emphasizing an incremental view of ability. Additionally, Bettina J. Casad has prepared a one-page document

² <http://www.reducingstereotypethreat.org/>

³ <http://gender.stanford.edu/>

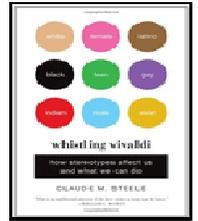
⁴ <http://gender.stanford.edu/news/2011/negativemathstereotypestoo-few-women-0>

⁵ www.reducingstereotypethreat.org



listing some of the ways "educators can help eliminate stereotype threat by altering the academic environment to be safe for all students."⁶

Simply indicating that, in earlier testing, males and females scored equally well on this test (or in this class) can impact women's scores. In recruiting efforts, showing pictures of successful women and employees of color in a STEM career and providing role models can both ignite interest and encourage all students to learn about a career. More extensive information can be found in Claude Steel's on Stereotype Threat; *Whistling Vivaldi: And Other Clues How Stereotypes Affect Us.*⁷



Attribution Theory is our next topic.

Attribution theory focuses on how people attribute events and how those beliefs interact with self-perception. There is evidence that suggests that women and men attribute success and failure differently. Women generally attribute their successes to hard work or to sources outside themselves such as a good teacher, an easy test, etc. Conversely, they attributed their failures internally - they are just simply not smart enough for the class. Men, by and large, attribute success and failure in the opposite manner!

In order to combat the possibly negative impact of Attribution Theory, educators and employers must illustrate that an increase in effort results in an increase in success. Educate students about incremental learning, and that brain capacity is not fixed but can be expanded. For more information, see the work of Carol Dweck.

A related topic is **Self-Efficacy**.

According to [Albert Bandura](#), self-efficacy is "the belief in one's capabilities to organize and execute the courses of action required to manage prospective situations." **Self-efficacy is the ability to "see one's self as successful in a particular task or role"**.

According to Bandura, people with a strong sense of self-efficacy⁸:

- View challenging problems as tasks to be mastered, they
- Develop deeper interest in the activities in which they participate, they
- Form a stronger sense of commitment to their interests and activities, and they
- Recover quickly from setbacks and disappointments

Conversely, people with a weak sense of self-efficacy:

- Avoid challenging tasks, they
- Believe that difficult tasks and situations are beyond their capabilities, they
- Focus on personal failings and negative outcomes, and they
- Quickly lose confidence in personal abilities

Bandura identifies four ways in which self-efficacy is developed: Mastery Experiences, Social Modeling, Social Persuasion, and Psychological Responses. Thus, as we meet with successes, thereby gaining confidence in our ability to complete a task, solve a mathematical equation, or decipher a complex engineering task, our self-

⁶ www.napequity.org/nape-content/uploads/Reducing+Stereotype+Threat.pdf

⁷ <http://www.amazon.com/Whistling-Vivaldi-Stereotypes-Affect-Issues/dp/039306249X>

⁸ http://psychology.about.com/od/theoriesofpersonality/a/self_efficacy.htm



efficacy becomes stronger. Self-efficacy is developed through the demonstration of incremental learning and providing small, manageable, but increasingly harder, tasks that a student can master.

When a school or department undertakes a conscious and consistent effort in Social Modeling by providing role models that look and sound like the students, it can have an enormous impact. Providing proof through modeling, that girls and students of color can succeed, is important, it may disprove the internalized message about career choice stereotypes that students have received all their lives - implicitly or not. While it is not as important as being the person experiencing the success, seeing a student who is similar in ability and characteristics succeed is a close second! In recruitment, it may be the first time a student is introduced to a possible career! If a female Hmong student has never seen a female Hmong engineer, it is unlikely that she will decide to become one. Indeed, the idea may never enter her mind regardless of her ability in STEM subjects.

Social persuasion relates to the messages we hear from others. Therefore, it remains extremely important that we pay attention to the things we say as well as the micro-messages we deliver.

Finally, psychological response refers to the emotional response we have about a situation. However, it is more important how the emotional response is interpreted! We all get nervous about public speaking – it's a natural response. However, if we interpret it as catastrophic, we will most likely not do well nor avail ourselves of additional opportunities to master public speaking. It will have a negative impact on our self-efficacy. However, if we interpret the nervousness as a natural response that feeds the speaker's ability, our self-efficacy will not take a hit nor will our performance suffer and we will remain open to additional public speaking opportunities.

Ok, as you can see, there are a host of barriers and solutions that are largely undiscussed, and that can have enormous impact on student success. The solutions to the barriers frequently cost little other than our time and awareness! What we need is professional development and a commitment to improving our communication and a strong commitment to educating all students about all the possibilities available to them.

Visit www.jspac.org for additional E-Seminars on barriers and solutions for Special Populations, and on Nontraditional careers and career choice.