EESTEM II Micromessaging Components

**Summer Institute:** 4 days
- Held at Host sites: Stark State College, OH and Dona Ana Community College, NM

**Professional Learning Communities:**
- 8 meetings
  - Held virtually throughout the year with a local lead Action research to identify areas for improvement in the STEM classroom

**Tools and Resources**

**Virtual Capstone Showcase**
- Sharing of results of classroom intervention

**Participating Teams:**
- 92 instructors from 15 community and technical colleges in 11 states with 342 additional faculty and administrators educated through extension activities.

**Micromessaging Cohort 1 FY18**
- Austin Community College, TX
- Bainbridge State College, GA
- Baltimore City Community College, MD
- Delpaco Community College, LA
- Northwest State Community College, OH
- River Parishes Community College, LA

**Micromessaging Cohort 2 FY19**
- Dona Ana Community College, NM
- Georgia Northwestern Technical College, GA
- Indian Hills Community College, IA
- National Technical Institute for the Deaf: RIT, NY
- North Idaho College, ID
- Owensboro Community & Technical College, KY
- Santa Fe Community College, NM
- Stark State College, OH
- Utah Valley University, UT

**Outcomes Summary**

Participants at least doubled their knowledge and understanding, based on their self-reporting. There were three and four-fold gains for many of the knowledge and skills identified for the Academy. Even though participants may have had exposure to the issues addressed by the Micromessaging professional development, and may have made the decision to make changes, they did not have the knowledge and skills to do so before completing the full Academy.

- **Knowledge and skills with the top five gains in learning, pre v. delayed post**
  - How to use the four sources of self-efficacy to increase success in STEM: 314.6%
  - How to move from deficit-based to asset-based learning: 289.5%
  - How to impact a student’s attribution style to improve their performance and persistence: 217.3%
  - How to reinforce a growth mindset to build students’ self-efficacy in STEM: 208.3%
  - How to disrupt the cycle of inequity and foster strategies that increase potential for success for marginalized students: 207.6%

**Top classroom practices changed or altered:**
1. Actively identified and challenged cultural stereotypes in their lives, on their campuses or institutions and among their interactions with others
2. Reinforced growth mindset by praising students for their efforts during the process, not their intelligence and final results
3. Increased student engagement (i.e. more involved in learning)
4. Reinforced self-efficacy (believe in their ability to be successful at some task related to the classroom, i.e. I can do this); and
5. Greater sense of belonging

- **83.7% observed positive impact on students:**
  - Increased student engagement (i.e. more involved in learning)
  - Increased self-efficacy (believe in their ability to be successful)
  - Greater sense of belonging

**Greater awareness among peers of the importance of creating an equitable learning environment:**
- More frequent conversations with colleagues about equity and the performance of women and girls, students of color, and students with disabilities (nearly 70%).

**Participants who were at sites who would then go on to get**
- A higher fidelity of implementation rating left the Institute with a higher self-perceived improvement in skill, suggesting perhaps more confidence, motivation, or other positive factor carrying them in to the school year.