

# ***Action Research:***

## **Transforming Educator Practice and Student Success**

### **National Alliance for Partnerships in Equity**

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N A P E

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N A P E

Build educators' capacity to implement effective solutions for increasing student access, educational equity, and workforce diversity.



# Examining the Small

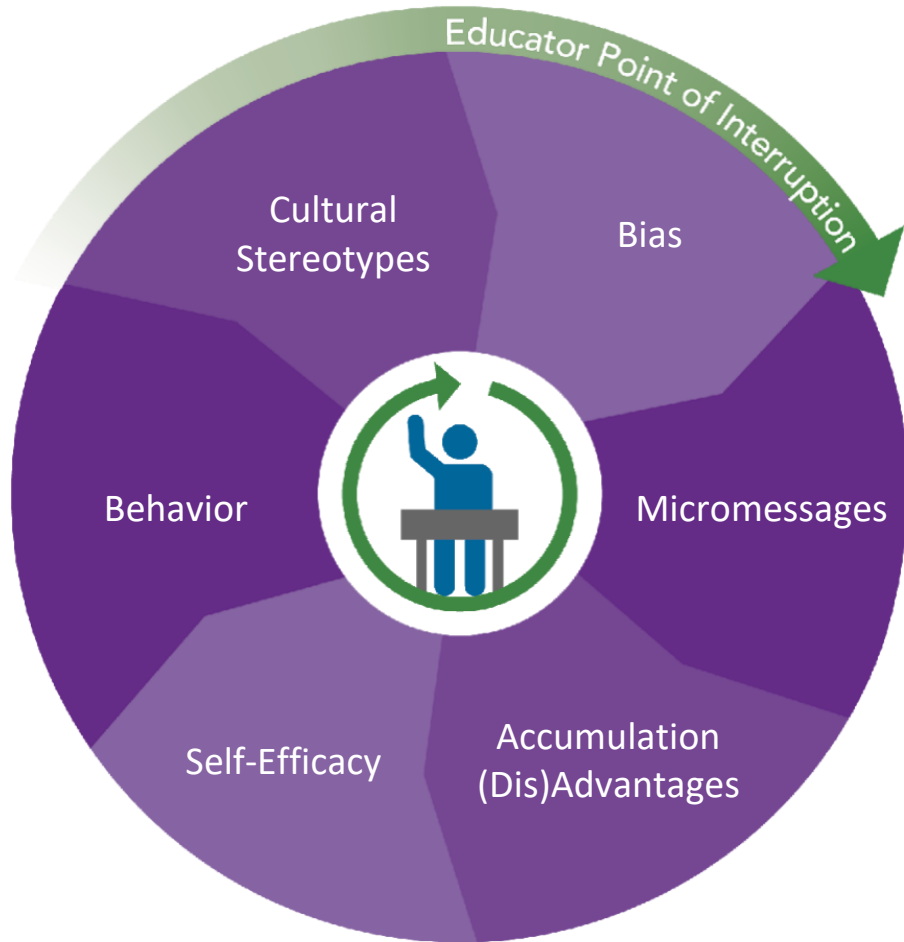


Think about a specific incident when you were being:

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

How did you know?

What did that person do to communicate your value?



# Our Roadmap

## NAPE Culture Wheel Framework for Change

# (UJA)<sup>2</sup>



# Action Research

## Workshop Objectives

- ✓ Review the NAPE Model for Change
- ✓ Examine Action Research Process
- ✓ Share Successes and Resources





# Impact

*Through campus-wide implementation of the NAPE equity strategies, student enrollment in all seventh and eighth grade pre-AP courses increased, participation in math and science pre-AP courses improved between 12% and 39%, and referrals to discipline decreased by 31%. We are committed to continue to implement NAPE strategies to build on this success.*

– Melissa Smith, Principal, Vanston Middle School,  
Mesquite ISD

# Micromessaging Academy



Micromessaging  
to Reach and Teach  
Every Student™

FULL CURRICULUM



Professional Learning

Peer Observations

Professional Learning Meetings

Action Research for Equity Projects

# Action Research

Identify opportunities for improvement  
Measure  
Implement strategies  
Measure again  
Report results  
Reflect and Develop Action Plan

## Action Research for Equity Project Resource

### What is Action Research?

An action researcher will try to solve a problem, answer a question, or understand something in their classroom or school by collecting and analyzing data and information in an organized way. The focus is usually on teaching and learning. For NAPE, it should have an **equity component** as well. The findings are applied directly to the educator's practice. Theory, practice, experience, and research meld together to create an individualized and empowering professional learning experience.

Educators make many decisions throughout the day that are guided by data and information. Counselors examine a student's history before giving them guidance. An administrator disaggregates test data to ensure that every student is learning. Teachers plan their lessons based on their knowledge of standards and student needs and modify their teaching strategies when necessary. Educators constantly analyze and interpret the information they receive to inform their everyday decisions and improve their practice.

Action research can sound intimidating, but it's simply a practical and systematic process for making these same types of decisions. **Action research is inquiry conducted by educators, working in their normal settings, to improve their practice and impact students positively.** Action research helps educators become more responsible for their professional growth by learning through application.

Action research is a cyclical process that is meant to encourage continuous improvement. You apply what you learn to improve outcomes for your students. The steps shown are only a guide. The actual process is often more fluid with the steps overlapping dynamically.



*Efron, S.E. and Ravid, R. (2020) Action Research in Education, Second Edition. New York: Guilford Press.*

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NAPE strives to create equitable learning environments where each student thrives and receives an education that prepares them to earn a living wage. We provide data-driven research, training, and evaluation to transform education and workforce systems at the individual, institutional, and system levels. We approach our work of broadening opportunity and success where equity and identity intersect to include gender, race, culture, ability, and socioeconomic.

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**ROUND ROCK**  
INDEPENDENT SCHOOL DISTRICT

**Goal:** Increase % of students in advanced math at 6<sup>th</sup> grade level

**Strategies:**

- Deep data dive/Root cause analysis
  - NAPE Program Improvement Process for Equity
- Student surveys – math interest
- Systems review – changed policies and practices – opt-out
- Parental information campaign
- Educator equity training – NAPE Micromessaging Academy

# Data Discussion

## Instruction

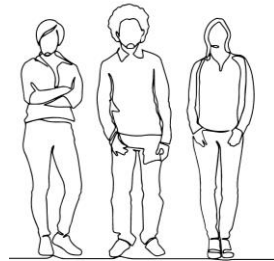
In small groups, discuss your data observations and the prompts.



## Prompts

List three observations.

What additional action research does the data evoke?



# Results

- ✓ Over 3 years, enrollment in Pre-AP math more than doubled from 33% to 75%.
- ✓ All demographic groups improved.
- ✓ Enrollment in Pre-AP math for students from low-income households increased from 16% to 65%.



**STONY POINT**  
LEARNING COMMUNITY

## PERCENTAGE OF 6<sup>TH</sup> GRADERS ENROLLED IN PRE-AP MATH

2017-2018		2020-2021	
ALL 6 <sup>TH</sup> GRADE STUDENTS			
33%		75%	
DEMOGRAPHICS			
ASIAN	63%	ASIAN	93%
BLACK	17%	BLACK	63%
HISPANIC	25%	HISPANIC	72%
WHITE	46%	WHITE	82%
OTHER	42%	OTHER	70%
INCOME			
LOW	16%	LOW	65%
NON LOW	56%	NON LOW	82%
GENDER			
FEMALE	35%	FEMALE	74%
MALE	31%	MALE	75%

# Resources

# Round Rock ISD



NATIONAL ALLIANCE FOR PARTNERSHIPS IN EQUITY  
**CASE STUDY**

**CREATING FUTURES WITHOUT BOUNDARIES**



### Increasing Enrollment in Middle School Advanced Mathematics at Stony Point Learning Community, Round Rock Independent School District, Texas

By Audrey Selden, JD, NAPE Lead for E3 Alliance



“NAPE programs took us from 33% of students in an advanced sixth grade math class to 75% with no extra allocation of funds or teachers. We've eliminated the gatekeepers to advanced classes – teacher recommendations, minimum STAAR/EOC scores, minimum class averages – and instead, replaced them with procedures that make this accessible to all.”  
– Dr. Natalie Nichols, Area Superintendent, Stony Point Learning Community, Round Rock ISD, Texas, 2021

Systemic educational improvement is happening in Central Texas. In 2018, the E<sup>3</sup> Alliance invited the National Alliance of Partnerships in Equity (NAPE) to be their equity partner in the **Pathways of Promise research-based initiative**, a collaboration with Central Texas School Districts funded by a grant from the Greater Texas Foundation. The E<sup>3</sup> Alliance collaboration includes **seven school districts** over the course of two multi-year grant iterations. Educators reported that implementing NAPE strategies impacted students in multiple ways.



Category	Number of educators who perceived this impact on students
Increased student engagement	89
Increased self-efficacy	87
Greater sense of community	71
Greater sense of belonging	70
Improved performance	67
Greater persistence when tasks were challenging	63
Greater interest in STEM careers	57

112 educators responded to the survey

**SCHOOL DISTRICTS PARTICIPATING**



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# Student Voice

GoPro Video  
Climate Survey  
Empathic Interview  
Student Report  
Focus Groups

10.25-11.1 HOW AM I DOING IN SCIENCE?

	Wednesday	Friday	Monday	Tuesday	Wednesday
I came to class on time.	✓	✓	✓	○	✓
I started my DO NOW without Ms. Gaffney asking me to take it out.	✓	✓	✓	○	✓
Volunteered to answer a question (without being called on first)	○	○	I went to see you volunteer tomorrow!	↑	
When called on, I was able to answer a question correctly OR ask for help		✓			
Redirection (I had to be asked to stop talking/to stay on task/to go back to my seat/to follow directions)	😊	😊 awesome!!	😊	😊 yay	
Respectful to my classmates and teacher.	✓+	✓	✓	✓	✓

10.25-11.1 HOW AM I DOING IN SCIENCE?

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I came to class on time.	✓	✓	✓	✓	✓
I started my DO NOW without Ms. Gaffney asking me to take it out.	✓	✓	✓	✓	✓
Volunteered to answer a question (without being called on first)					
When called on, I was able to answer a question correctly OR ask for help		Great Job!			
Redirection (I had to be asked to stop talking/to stay on task/to go back to my seat/to follow directions)	😊	Great day today!			
Respectful to my classmates and teacher.	✓	✓	✓	✓	✓

# Micromessaging AREP Examples

## Teravista Elementary School RRISD

### RESEARCH FOCUS QUESTION

Will deliberate use of  
micro-affirmations change  
students' reports of self-efficacy?



## STRATEGIES APPLIED

- X Incorporated calling students, “scientists” and “mathematicians” into our daily routine
- X Peer shoutouts (students submitted shoutouts or “kudos” to peers and we shared them at the end of the day)
- X Providing deliberate micro-affirmations to students throughout the school day (positive feedback, encouragement, recognizing effort)



## COMPARING SURVEY RESULTS

- x 82% of students think they can do anything they set their mind to (59% in Nov.)
- x 76% of students think it is okay to make mistakes (58% in Nov.)
- x 76% of students consider themselves scientists & mathematicians (30% in Nov.)
- x 95% of students believe they can achieve their goals (53% in Nov.)



# Climate Surveys Teacher and Student Voice

## Next Steps – Moving Forward

- Continue routinely analyzing behavior data, with a more focused lens on how our efforts are improving the actual raw data, in addition to the climate survey data.
- Continue the work of the Behavior RTI Team and the behavior interventions and processes, with more focused and sustained efforts in communicating, informing, and developing teachers and staff throughout the year.
- Include a focus on how our campus responds to positive student behaviors.

Math Matters  
for Everyone

EDUCATORS





# Action Research Results



## Examples of Impact in K-12 and Higher Education

NAPE facilitation has, quite honestly, been the single best quality training I have received...if you are considering how to create a more equitable classroom environment or just simply become a better educator in general, **THIS TRAINING IS A MUST!**

Chris Camacho  
Science Teacher  
▶ Hear Chris Share His Experiences



As a participant in NAPE's pilot Certified Educational Equity Coaching program, I have experienced more personal and professional growth in the past 4 months than in the past 4 years. It's been a truly transformational experience for myself, for the teachers I support, and for the students now being welcomed back into the learning process.

Christopher Martell  
Learning Specialist  
▶ Read Christopher's Case Study



Our NAPE programs took us from 33% of students in advanced 6th-grade math class to 75%. We've eliminated the gatekeepers to advanced classes—teacher recommendations, minimum test scores, minimum class averages—and instead replaced them with procedures that make this accessible for all.

Natalie Nichols  
Area Superintendent,  
Stony Point Learning  
Community



▶ Hear Natalie Share Her Experiences

**Micromessaging to Reach and Teach Every Student™** combines the power of micromessages with research grounded strategies to create equitable learning environments where every student can thrive. The NAPE Culture Wheel frames the discussion of micromessaging.



Examples of impact from various STEM Equity Micromessaging Academies:

- Students of NAPE trained teachers were 3 times more likely to choose a STEM pathway
- 8th grade algebra course requests grew from 134 to 212, girls went from 52 to 105, Black and Hispanic students doubled from 28 to 58
- Enrollment increased in every 7th and 8th grade Pre-AP course; with increases between 12% and 39% in Pre-AP math and science, referrals to discipline decreased by 31%
- STEM related AP tests passed (score of 3 or above) increased 100%
- 84% of college faculty observed a positive impact on students. ▶ See Poster
- Pre-to-post surveys demonstrated:
  - statistically significant increase in educator self-efficacy
  - > 200% increase in equity knowledge and skills
  - 98% agreement with the statement: "I believe all students can succeed in STEM disciplines."

▶ Learn more about Micromessaging Programs

**Coaching for Educational Equity** is a sustainability program designed to enhance self-efficacy in providing feedback to others and leading with an equity lens.

- Pre-to-post surveys demonstrated a significant increase in equity coaching skills and knowledge.

▶ Learn more about Coaching Programs

**Program Improvement Process for Equity™ (PIPE)** effects change using data-driven analysis of root causes of opportunity gaps and application of research-based strategies and outcome measures. Examples from PIPE programs focused on increasing diverse representation of girls in nontraditional careers follow.

- Welding enrollment from fall to spring semester grew from 4 to 38 ▶ Article
- District enrollment in Project Lead the Way increased 48%. 3 schools grew enrollment of girls from 78-119 (53%); 12-25 (108%); and 4-11 (175%)
- 82% enrolled in senior math, with 55% in advanced math, up 250%
- IT enrollment grew 23%
- Enrollment and persistence increased in Design and Engineering.

▶ Read Brandywine School District Case Study



PIPE is now offered with **Leading for Equity** to provide a framework to address equity in policies, procedures, internal systems, communication and community engagement.

▶ Learn more about PIPE

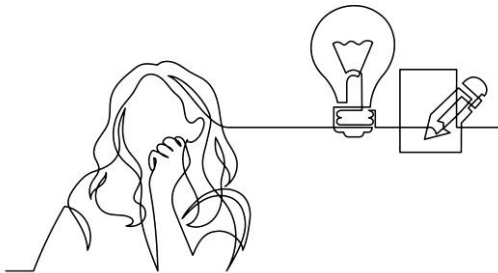
# How will your educator practice continue to invite students into learning?

## Instructions

Reflect on the action research for equity projects.

## Prompts

How might you use action research in your educator practice?





# THANK YOU!



**For more information, please contact  
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