



National Alliance for Partnerships in Equity Education Foundation

Alignment of NT Root Causes and Micromessaging

NTRC CODE	NTC ROOT CAUSE	MM UNIT (S)	MM SUBUNIT	MICROMESSAGING SUPER STRATEGIES
1.0	EDUCATION			
1.1	Academic Proficiency When female students are academically proficient, they are more likely to persist in choosing nontraditional careers, while the opposite is more predictive for male students.	2. MM 3. NS	Micro-affirmations Learning Process Visualization/ Spatial Skills	<ol style="list-style-type: none"> 1. Provide micro-affirmations that support student self efficacy 2. Provide students with opportunities to practice new skills and exercise their increased knowledge. 3. Develop your ability to apply the stages of the learning process in your curriculum delivery. 4. Use what students already know and can do as a basis for developing new skills. 5. Teach visual-spatial skills by integrating activities in your classroom that build student skills such as: <ol style="list-style-type: none"> a. Lego sets b. Suitcase packing c. Kitchen cabinet organizing d. Block building exercises e. 3D puzzles f. Sims computer programs and games 6. Use micro-affirmations to support students' movement toward mastery. 7. Teach students that ability can be enlarged and expanded throughout life, and that brain power is incremental. Emphasize that intelligence is malleable and, with hard work, they will become smarter and more capable.
			Learning Process	



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		4. SLT	Mindset	
1.2	Access to and Participation in Math, Science, and Technology Encourage participation and success in math, science, and technology courses, especially those taught in an equitable and “hands-on” manner.	7. ELE	Administrative Equity	<ol style="list-style-type: none"> 1. Identify institutional or organizational policies that may unintentionally create inequity. 2. Perform an environmental scan on your classroom and address climate issues. 3. Make other programs available such as after-school, weekend or summer camps. 4. Create awareness of other programs such as after-school, weekend or summer camps.
1.3	Curriculum Essential elements of a bias-free curriculum include relevancy, inclusive images and text, and hands-on instructional practice.	7. ELE	Curricular Equity	<ol style="list-style-type: none"> 1. Review curriculum and the implicit biases that unintentionally restrict access and equity. Correct bias in curricular and professional materials.
1.4	Instructional Strategies Students prefer learning experiences that they help to design, that are learner centered, and that involve them in a community.	7. ELE	Pedagogical Equity	<ol style="list-style-type: none"> 1. Utilize either virtual investigations or hands-on activities. 2. Utilize real-life examples that are relevant to your students. 3. Incorporate student experiences and culture in the instructional process. 4. Provide students with periodic opportunities to share anonymous feedback. 5. A diversity of learners will benefit from the implementation of multiple strategies for conveying information in the classroom



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		5. Culture	Multicultural competence	<p>such as: (participant uses more than one from this category)</p> <ol style="list-style-type: none"> Problem-based learning Non-directive (facilitative) teaching Self-esteem building Self-efficacy building Group investigations or learning Role playing
1.5	<p>School/Classroom Climate Students who experience a school climate supportive of nontraditional careers and gender equity are more likely to participate in nontraditional careers.</p>	6. STC	Prep for STEM Career	<ol style="list-style-type: none"> Build awareness, knowledge, and skills about the multiple and diverse cultures that students come from in your class and factors that may influence their learning outcomes so you can create an inclusive, equitable classroom. Develop lessons and activities that reflect you awareness and acceptance of multiple cultures and perspectives. Develop work place skills that enhance students' potential for being successful in STEM careers. Expose students to scientists, technologists and engineers from different demographic and cultural lenses through posters, books, and websites. Invite a role model/guest speaker to talk to your class. Pair students with mentors, coaches, or advocates from the workforce. Develop work-based learning experiences and opportunities. Perform an environmental scan on your classroom and address climate issues.



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		7. ELE	Equity	
1.6	Support Services Students enrolled in nontraditional career and technical education support services are more likely to succeed.	7. ELE	Equity	1. Create awareness about support services on campus or at school. (include tutoring)
2.2	Early Intervention Providing information about nontraditional careers at the ages at which young people are more open to considering nontraditional careers and haven't yet excluded essential preparation will increase participation in nontraditional careers.			
2.0	CAREER			
2.1	Materials and Practices: Assessment, Interest Inventories, and Marketing and Recruitment Career guidance materials and practices that adhere to equitable standards can increase participation in classes that lead to nontraditional careers. Traditional awareness-raising recruitment methods such as brochures, talks, or demonstrations alone are helpful, but insufficient to impact career decision making.	2. MM 6. STC	STEM Pathways for every student	<ol style="list-style-type: none"> 1. Encourage every student to explore their options and opportunities using micro-affirmations. 2. Conduct the STEM Career Activity (lesson plan and worksheets) with your students. 3. Practice effective career guidance 4. Provide information about high wage, high skill careers
2.3	Characteristics of an Occupation: Job Satisfaction/Career-Family	6. STC	Linking STEM career to student work	1. Incorporate the benefits of STEM careers into discussions that will appeal to the work values of students of different class, race, ethnicity, and gender.



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	<p>Balance/Occupational Perception/Wage Potential</p> <p>Careers that give back to the community, directly or indirectly, can attract both male and female students to nontraditional fields. Providing comprehensive information about high-wage, high-skill careers, especially STEM, promotes participation in nontraditional careers.</p>			<ol style="list-style-type: none"> 2. Conduct the work values activity (lesson plan) and worksheet with your class.
<p>3.0</p>	<p>FAMILY</p>			
<p>3.1</p>	<p>Family Characteristics</p> <p>Characteristics and engagement of family of origin have a strong influence on career choice.</p>	<p>5. Culture</p>	<p>Impact of family</p>	<ol style="list-style-type: none"> 1. Involve, invite, and include parents, when appropriate, in discussions taking into account the many ways of communicating and the barriers parents in poverty face to Internet access, transportation, and taking off from work. 2. Involve like-minded peers in programs to foster a sense of belonging in the academic community. 3. Practice positive naming – help the student identify someone in their life who recognizes the students’ potential, connects the student’s strengths to characteristics of a profession, and teaches them how to enter that field.
<p>5.2</p>	<p>Peers The opinions of peers, especially during adolescence, can influence nontraditional career choice.</p>	<p>2. MM</p> <p>5. Culture</p>	<p>Micromessaging</p> <p>Human Development</p>	<p>For adolescents:</p> <ol style="list-style-type: none"> 1. Determine how your words and actions (micro and macro) interact with and impact student identity. 2. Be aware of how your words and actions can help students struggling with social interactions and grappling with moral decisions, such as bullying. 3. Utilize peer interactions as a significant influence of adolescent behavior to achieve positive outcomes.☒ <p>For adults:</p>



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			<p>Micromessaging Human Development</p>	<ol style="list-style-type: none"> 4. Determine how your words and actions (micro and macro) impact students' ability to build meaningful relationships in your class versus feeling isolated. 5. Consider student behavior based on her or his stage of development versus your own and modify your expectations to align with developing values. 6. Set goals and benchmarks to include more diverse adults in the education community.
4.0	INTERNAL/INDIVIDUAL			
4.1	Self-Efficacy The strength of female students' self-efficacy is directly related to entry and persistence in a nontraditional career.	<ol style="list-style-type: none"> 2. MM 4. SLT 	<p>Micromessaging Self Efficacy</p>	<ol style="list-style-type: none"> 1. Provide micromessages that support student self-efficacy 2. Look for ways to incorporate the four sources of self-efficacy (mastery and vicarious experiences, physiological states and social persuasions) 3. Provide information about self-efficacy and self affirmation to students. 4. Teach students to self-affirm. 5. Create opportunities for students in safe groups to assume different positions or roles so they can test them out and see others in new roles. 6. Encourage and affirm risk taking by students who try new roles or activities inside or outside their classrooms. 7. Provide opportunities for every student to be a leader, recognizing there are many models of leadership, such as executive (decision maker) versus legislative (consensus builder).
4.2	Attribution Both attribution and fixed traits can affect motivation and confidence to achieve in a	4. SLT	Attribution	<ol style="list-style-type: none"> 1. Provide feedback that is specific to each student. 2. Identify difficult concepts and provide specific support to help students master them.



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	nontraditional career.				<ol style="list-style-type: none"> 3. Repeatedly highlight successes that counteract the students' negative attributions. 4. Attribute success to hard work – “This was a difficult concept; I can tell you studied/practiced.” 5. Encourage students toward internal/stable attribution profile.
4.3	Stereotype Threat Achievement is positively influenced by the reduction in stereotype threat.	4. SLT	Stereotype threat	Mindset	<ol style="list-style-type: none"> 1. Challenge stereotypes as they arise, even unspoken ones. 2. Create counter-stereotyping imaging. 3. Tell your students when tests show no gender differences. 4. Provide role models/mentors to balance stereotypes. 5. Adapt and encourage a growth mindset focus.
4.4	External Influences. The constant and often stereotypical exposure of media solidifies stereotyping.	5. Culture	Intersectionality	Mindset	<ol style="list-style-type: none"> 1. Become aware of the many identities we have that intersect to make us uniquely who we are. 2. Be careful of “helpful” classifications that may inadvertently alienate students. For example “all girls like to shop” or “all boys like sports.” 3. Teach individuals to affirm all aspects of their individual identity, which may be an intersection of many elements. “I am part Hispanic, part African American, and part Italian” or I am a Catholic, vegetarian, dog loving, African American, tennis player.” 4. Teach critical thinking about the way in which the media narrowly portray STEM and CTE programs and careers by selecting actors with or without specific characteristics.