

**Discourse Moves for Fostering Confident Math Learners** 

# We ALL speak math

North Carolina Collaborative for Mathematics Learning

www.nc2ml.org

### **Assigning Competence**

#### What is it?

A specific form of praise where teachers catch students being smart and praise them in a way that is public, specific to the task, and intellectually meaningful. This move is essential to interrupting assumptions based on simplistic views of smartness, developing math identities, and students recognizing strengths in themselves and their peers.

### Why do we use it?

Assigning competence is used to disrupt structures and language that marginalizes students. This move is not one to use for all students, rather it is used to intentionally interrupt assumptions about particular students and to diminish hierarchical status among students (i.e., perceptions of differences in smartness and ability to participate).

### When Assigning Competence...

#### Teachers are...

- expanding their ideas for what counts as smartness
- making sure the praise they give is public so it is heard by other students
- making sure that praise is specific to the task so that students can make the connection between their behavior and their mathematical contribution
- making sure praise is given with sincerity

### Students are...

- developing confidence in their learning
- expanding their ideas of what counts as smartness
- seeing their peers ideas as valued contributions
- developing a positive math identity

Notice how Emily converted all of her measurements to the same unit. It simplified her calculations and helped her interpret the parameters of her function. That was clever Emily – well done! Wow Noah! Your group was having trouble figuring out the rule for this function. That was great that you figured out that -5 was the rate of change. That was a really important connection that moved the group forward.



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### **Discourse Move: Assigning Competence**



This world calls for problem solvers. Math classrooms can cultivate the thinkers we need. Empowering students to find their math identity.





# **Support for Administrators**

#### NC Professional Teaching Standards

# Implementation of Assigning Competence aligns to Standard 1 and Standard 2.

- **1a.** Teachers establish a safe and orderly environment.
- **1a.** Teachers empower students.
- **2a.** Teachers encourage an environment that is supportive.
- **2c.** Teachers appreciate the differences and value the contributions of each student in the learning environment by building positive, appropriate relationships.

### NC Portrait of a Graduate

# Implementation of Assigning Competence aligns to the Learner's Mindset, Communication, and Personal Responsibility competencies.

- Possess an ongoing desire to learn, unlearn, and relearn.
- Develop positive attitudes and beliefs about learning.
- Articulate thoughts and ideas effectively using oral and written skills.
- Take ownership of decisions.

# Standards of Mathematical Practice (SMP)

# Mathematically proficient students...

## Make sense of problems and persevere in solving them.

They monitor and evaluate their progress and change course if necessary.

### Construct viable arguments and critique the reasoning of others.

They justify their conclusions, communicate them to others, and respond to the arguments of others.

# Look for and express regularity in repeated reasoning.

As they work to solve a problem, they maintain oversight of the process, while attending to the details. They continually evaluate the reasonableness of their intermediate results.



When working with a teacher, here are some questions to help coach the teacher to implement the discourse move of Assigning Competence in their classroom.

### Clarifying Questions...

- How do you build positive and appropriate relationships with each student to foster a sense of belonging and create an inclusive learning environment for mathematics to flourish?
- How do you encourage students to take ownership and pride in their decisions and learning?



### **Digging Deeper for Discourse**

- How do you cultivate an ongoing desire to learn, unlearn, and relearn as a teacher? How do
- you stay updated with the latest research, methodologies, and best practices in education to enhance your teaching effectiveness?
- How do you empower students to make informed choices and actively participate in their mathematical journey?

Assigning competence challenges the status quo. Math teachers come together to ensure each and every student sees themselves as a strong mathematical thinker.

Note: This resource is being co-designed by the NC math education community. We welcome feedback to inform its refinement at <a href="https://forms.gle/8PBWGsvqJQzcdtCF8">https://forms.gle/8PBWGsvqJQzcdtCF8</a> Check the website (nc2ml.org/high-school-teachers) for the most up to date resources.

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