NCTM 2017

Relational Interactions: Dimensions, Definitions, and Examples

Dimension	Description	Positive Examples of Interactions
Addressing Behavior	Responses to student behavior. Includes escalating behavioral issues or managing them privately.	 Noting positive models of behavior. Handling misbehavior discretely. Avoiding a hyper-focus on misbehavior.
Framing Mathematics Ability	Comments that frame students' ability to do mathematics. Considers the ways in which competence is framed as innate or incremental.	 Framing students as competent mathematically. Relating student thinking to more complex mathematical ideas. Explicitly challenging societal stereotypes about success in mathematics.
Acknowledging Student Contributions	Responses to students' mathematical contributions. Entails ways in which teacher values/devalues or praises/disparages students' thinking.	 Recognizing correct aspects of student thinking with incorrect answers. Pressing for complete explanations to show care about the details of student thinking for correct and incorrect answers. Revoicing student explanations rather than focusing simply on answers.
Attending to Language and Culture	References to cultural or linguistic contributions of students. Includes inclusion/omission of everyday experiences of students in mathematics instruction as well as varied uses of language and body movement.	 Drawing on students' everyday experiences in designing problem contexts. Allowing students to solve problems in language or dialect of preference before explaining their thinking. Revoicing student explanations across languages.
Setting the Emotional Tone	Communicating expectations of acceptable behaviors and emotions. Consists of preempting behavior (as opposed to a direct response) and creating emotional space for students.	 Relating to students through personal stories and being emotive. Validating student emotions during mathematics. Supporting perseverance and effort in mathematics.