Curiosity and Confidence

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Curiosity and confidence are two of the dispositions highlighted in this course.

Curiosity relates to the fulfillment that comes with exploring some unknown idea or process. One goal of a rich mathematical program is to foster a relentless curiosity among students such that they push the boundaries of their own knowledge and, via more open-ended mathematical experiences, be provided with opportunities to make new discoveries of their own.

Confidence refers to how we see ourselves in a mathematical space; whether we view our thinking as strong and worthy of consideration or hesitate to contribute. Meaningful mathematics instruction and experiences fosters students' confidence as capable mathematical thinkers and doers.

Curiosity and confidence can be fostered in mathematics classrooms that position students as active sense-makers. For example, students might explore how to partition rectangles and squares into fourths in different ways and determine whether the resulting parts are always equal. Through the exploration of folding, cutting, rearranging, or overlaying the pieces, they discover that although the partitions look different, the total area remains the same. As they discuss their reasoning, listen to peers' perspectives, and refine their thinking, they build confidence in their ability to justify mathematical ideas and recognize equal partitions.

By intentionally designing mathematical experiences that nurture students' curiosity and build their confidence, we help them see mathematics as an open and dynamic space where their ideas matter.