

## MATHEMATICS AND LANGUAGE: Supporting English Learners in Mathematics Classrooms

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**Understanding Language** | Language, Literacy, and Learning  
in the Content Areas



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## MATHEMATICAL PRACTICES

- 1) Make sense of problems and persevere in solving them
- 2) Reason abstractly and quantitatively
- 3) Construct viable arguments and critique the reasoning of others
- 4) Model with mathematics
- 5) Use appropriate tools strategically
- 6) Attend to precision
- 7) Look for and make use of structure
- 8) Look for and express regularity in repeated reasoning

## **SUMMARY: Recommendations for Connecting Math Content to Language**

- #1. Focus on students' mathematical reasoning, not accuracy in using language.
- #2. Focus on mathematical practices, not language as single words, vocabulary, or grammar.
- #3. Recognize the complexity of language in math classrooms.
- #4. Treat everyday and home languages as resources, not obstacles.
- #5. Uncover the mathematics in what students say & do.

## **REFERENCES**

### **PRESENTATION BASED ON THREE PUBLICATIONS:**

1. Supporting the participation of English language learners in mathematical discussions. 1999, 19(1). For the Learning of Mathematics.
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<http://people.ucsc.edu/~jmoschko/>
3. Mathematics, the Common Core, and Language. 2012, available online <http://ell.stanford.edu/>

### **OTHER PUBLICATIONS:**

Using two Languages when learning mathematics, Research Brief, NCTM, 2009, online at [nctm.org](http://nctm.org)  
More publications listed on web page <http://people.ucsc.edu/~jmoschko/>