

# Supporting Writing Skills in English Language Learners

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by Rafaela M. Santa Cruz and Ivette Sanchez-Gutiérrez

The January/February Equity column discussed incorporating classroom routines that give English language learners (ELLs) opportunities to listen, speak, read, and write about mathematics. Of these four, writing is the most difficult skill for students to develop. Writing well is not simply a matter of converting spoken words to text. Skilled writers must master many different types of writing with specific structures, vocabulary, and conventions. According to Gibbons (2005), students learning English as a second language are less likely to be familiar with



the particular organizational structure of different kinds of writing or the grammatical structures of English.

Two accessible, hands-on classroom activities that can help ELLs develop writing skills while advancing their learning of mathematics are making collaborative posters and working with  $2 \times 2$  sentence builders.

### **Collaborative Posters**

Making posters collaboratively in small groups gives students an opportunity to represent information. Provide the students with a model, and have each group explain a different problem. Working in groups of three or four gives students a chance to share what they know with the members of their groups and later with the entire class. To ensure accountability, equal access to the task, and full participation by all group members, give each student a different-colored marker. Having the students work in different colors will give you a way to analyze and assess each student's contribution.

Have the students fold the prospective poster in three sections by turning in the shorter edges to meet in the middle without overlapping. Ask the students to turn the poster 90 degrees and write the problem and title in the top section, show their work and any graphics in the large middle section, and use the bottom section to write a summary of the problem with the aid of sentence frames. Providing sentence frames—"fill-in" sentences with missing words, phrases, or clauses for students to supply—will structure and scaffold understanding while giving ELLs the support that they need for speaking in front of their classmates. When your students have had enough time to finish the poster (12 to 20 minutes), select two students from each group to present their group's work, encouraging them to assist each other as they speak.

Many mathematical tasks are suitable for collaborative posters. One example for middle school students could be to make a table showing what  $x^0$ ,  $x^1$ ,  $x^2$ ,  $x^3$ , and  $x^4$  equal for particular values of x. Give each group a different value—2, 3, 4, 5, or 10, for example. Ask the students to write their task in the top quarter of their poster, create their table and show their work in the next two quarters (with each person using only his or her colored marker), and use the final quarter to copy and complete the following sentence frames:

- The pattern that our group discovered as we went from one row to the next is...
- The relationship between the exponent and number is...
- Our value for x raised to the 1st power is...
- Our value for x raised to the 0 power is...

## 2×2 Sentence Builders

Using new vocabulary in sentences can reinforce students' understanding of the terms. A  $2\times2$  sentence builder can help students link related words. Select four related vocabulary words that you want students to be able to use fluently. Place the words in a  $2\times2$  grid. Ask your students to work in pairs to create a sentence using the two words in each column, row, and diagonal, for a total of six sentences. Emphasize that their sentences must be mathematical, complete, and correct.

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- Given the four terms *fraction*, *denominator*, *numerator*, and *decimal fraction*, students would write six mathematical sentences containing the following pairs of words:
- Fraction/denominator ("The denominator in a fraction tells you how many parts the whole is divided into.")
- Fraction/numerator ("The numerator of a fraction tells you how many parts of the whole you have.")
- Fraction/decimal fraction ("A decimal fraction is a kind of fraction that tells how many you have out of some power of ten.")
- Numerator/decimal fraction ("When you change a decimal fraction to a fraction, the numerator is easy to find.")
- Numerator/denominator ("The top number of a fraction is called the numerator and the bottom number of the fraction is the denominator.")
- Denominator/decimal fraction ("When you change a decimal fraction to a fraction, the denominator is a
  power of ten.")

For additional language development, form groups of four and have students read their sentences to each other. Each group can select one sentence to share with the entire class. For a greater challenge, put nine words in a  $3\times3$  grid, and ask your students to create eight sentences, each with three of the words.

## **About the Authors**

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### Reference

Gibbons, Pauline. "Writing in a Second Language across the Curriculum." In *Academic Success for English Language Learners*, edited by Patricia Richard-Amato and Marguerite Ann Snow (pp. 275–310). White Plains, New York: Longman, 2005.

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