From Exposure to Mastery:
Helping Adult English Language Learners
Develop Content Knowledge in Math

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Why do children dread mathematics? Because of the wrong approach. Because it is looked at as a subject.
What led us to developing this project?

We use math everyday... look around!

- operations
- measurement
- fractions
- capacity
- elapsed time
- perimeter & area

http://twoboysanddadateacher.blogspot.com
What we hoped to accomplish:

Support teachers as they integrate math into ESOL lessons
  • Address and discuss misconceptions
  • Monitor teacher progress and practice via Likert surveys

Create lessons and classroom activities made by teachers, for teachers
  • Develop math lessons that easily integrate into the curriculum
  • Organize and publish a guide to share among the field
What was the process?

1. Facilitate teacher share on experience of teaching math in ESOL
2. Dispel misconceptions about math and math instruction
3. Provide examples of lesson plans or activities
4. Teachers associate a math skill with a language connection
How we measured our progress:
“Students used charts to categorize foods based on food group and aisle in the grocery store.”

“Students in the Literacy class learned key words and phrases, such as “more” and “less.””

“I was able to insert analysis of tables with numbers into a lesson about higher education expenses and financial aid in a way that was super helpful and relevant for my students.”
Look at the picture. What do you see?
It is December 22.
It’s time for the holidays.
Juan is going to the Dominican Republic.
He is going to visit his parents.
He is excited.
He needs to pack his luggage.
It’s very hot there.
He doesn’t need to bring his coat.
He needs to bring some T-shirts and some pairs of shorts.
He needs some good outfits.
He will be in the Dominican Republic from December 23 to December 26.

Talk to your classmates for 5 minutes. Ask these questions.
1. How many T-shirts does he need?
2. How many pairs of shorts does he need?
Juan brings 1 pair of brown shorts and 1 blue T-shirt.

How many outfits does he have?

One.
Juan brings 4 pairs of shorts. One brown pair, one navy pair, one grey pair, and one black pair.

How many outfits does he have? Write what you think next to “prediction”.

See if you are correct. Write the color names or use colored pencils and make the outfits.
## Index of Teacher Resource

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Index will enable teachers to seamlessly integrate a math lesson into a particular theme, such as food or clothing, or by language connection, such as skimming or discussion.
What we would have done differently

- Given the somewhat unexpected focus on teacher training, we could have been better prepared with a more developed metric (survey).
- The guide should be more developed and ready to publish at this stage.
- Going forward I would like to do more teacher training that could result in a better collection of lessons and activities.
MATH IN DAILY LIFE

- Patterns
- Measurement
- Estimation
- Problem Solving
- Probability
- Fractions
- Time
- Symmetry
- Money
- Geometry