STRATEGIES FOR TEACHING MATHEMATICS TO STUDENTS LEARNING A SECOND LANGUAGE

Eric Siegel and Rachel Woolley

Generation Ready New York City Public Schools

In the past, mathematics was often thought to be a refuge for second language learners, a subject whose numbers and symbols could be understood by all. Today, however, it is understood that the learning of mathematics is mediated through language, creating special problems for students learning in a language in which they are not yet fluent.

Fortunately, research has surfaced a number of effective strategies for supporting second language learners to simultaneously learn mathematics while also learning the new language. One way to categorize these strategies is as follows:

- Making teachers' presentation of mathematical content more comprehensible
- Providing more opportunities for student talk
- Providing support for enriching student talk to ensure that it is mathematically meaningful

While touching on strategies from all three categories, our talk will focus intensively on classroom protocols for supporting meaningful student talk.

Planned timeline	Topic	Material / Working format / presenter	
5 minutes	Introductions and gauging the experience and interests of the participants	Discussion / Woolley	
10 minutes	Brief review of research impacting our workshop	Powerpoint presentation / Siegel	
10 minutes	Preparing for first video clip by trying out the protocol	Simulation / Woolley	
15 minutes	First video clip	Video analysis / Woolley	
10 minutes	Preparing for second video clip by trying out the protocol	Simulation / Siegel	
15 minutes	Second video clip	Video analysis / Siegel	

Siegel and Woolley

15 minutes	Workshop conclusion	Discussion /	Woolley	and
		Siegel		

References

Anhalt, C.O. (2014). "Scaffolding in Mathematical Modeling for ELLs." In M. Civil, & E. Turner (Eds.), *The Common Core State Standards in Mathematics for English Language Learners Grades K* - 8. (pp. 111-126). Tesol Press: Virginia, USA.

Bresser, R. et all (2009). *Supporting English Language Learners in Math Class*. Math Solutions Publications: California, USA.