

TEACHING MATHEMATICS WITH STUDENTS FROM CULTURALLY AND LINGUISTICALLY DIVERSE BACKGROUNDS

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Short description of the workshop: aims and underlying ideas

Focusing on upper elementary and midlevel mathematics, this interactive workshop is geared towards an audience of practitioners who want to experience methods useful to engage culturally and linguistically diverse students in meaningful learning. This workshop employs a mix of research presentation, activities, and conversations on teaching in today's classrooms. Gay's (2010) framework of culturally responsive teaching will be used to discuss how to create equal learning opportunities for all learners. From an understanding that diversity is an asset to our classrooms, participants will be introduced to strategies to foster cultural and language learning activities which are useful in enhancing math lessons. This bilingual workshop will be partly in German and partly in English to emphasize the challenges language learners may experience. Practitioners will be given guidance and strategies for implementing culturally responsive teaching in classrooms. The strategies may be especially relevant for teachers of mathematics in Germany given the current increase of culturally diverse students. The workshop will be guided by the questions: What challenges do culturally and linguistically diverse students face as learners of mathematics? What strategies can teachers use to integrate cultural learning opportunities and language learning opportunities into their teaching of mathematics?

Planned structure:

Planned timeline	Topic	Material / Working format / presenter
5 min	Introductions and goal setting	Group conversation
10 min	From opportunity gap to achievement gap: Why students might not identify with context and content in our schools.	Lecture and discussion. PowerPoint / Handouts
10 min	Authentic classroom activities to demonstrate challenges diverse students might encounter in traditional mainstream classrooms.	Whole group activity and discussion PowerPoint, Handouts, Examples of student work
5 min	Gay's framework of culturally responsive teaching will be presented as a way to close the opportunity gap.	Presentation

5 min	Debunking myths about teaching mathematics with culturally and linguistically diverse learners	Whole group activity
35 min	Authentic classroom activities and teaching strategies: - Problem based instruction - Entry points, - Planning and anticipating - connecting math and students: creating meaning -language support and mathematical discourse	Small Group Activities and Conversation Manipulatives, Language support material, graphic organizer, other resources
17min	Sharing ideas and strategies of culturally responsive math teaching.	Whole group activity
3 min	Wrap up: The exit cards Receive a handout, including a summary of the workshop as well as an activity guide.	Exit cards, Handout: Summary and Activity guide

References

- Gay, G. (2009). Preparing culturally responsive mathematics teachers. In B. Greer, S. Mukhopadhyay, A. B. Powell, & S. Nelson-Barber (Eds.), *Culturally responsive mathematics education* (pp. 189-206). New York, NY: Routledge.
- Gay, G. (2010). *Culturally responsive teaching: Theory, research, and practice* (Multicultural Education Series, 2nd ed.). New York, NY: Teacher College Press.