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Mathematics Teacher Training, Algebra, and Teacher Shortages / Formation des enseignants en mathématiques, algèbre, et pénuries d'enseignants

This working group will discuss some of the current issues and challenges in mathematics teacher education at the secondary level. The main questions will relate to algebra and pre-service training, but overlaps with inservice education will occur during the third session. More specifically, the three sessions are structured as follows:

Session 1

- What are the big ideas of algebra for grades 7-12 pre-service teachers?
- What algebra ideas draw our attention to mathematical relationships and offer opportunities for experiencing the pleasure of critical thinking and mathematical insight?
- What does this look like in the mathematics classroom?

Session 2

- How should we prepare pre-service teachers to teach algebra?
- Do we continue preparing our preservice students to teach some algebraic manipulation?
- Do we question where the teaching of algebra is going? How do we do this?

Session 3

- How do we deal with non-mathematics teachers teaching mathematics?
- What are some inservice/retraining models used in the various provinces?
- How do we deal with the shortage of mathematics teachers?