

# WHAT MATHEMATICS IS ON OFFER HERE?

Erlina Ronda and Jill Adler

Wits Maths Connect Project, University of the Witwatersrand

**TARGET AUDIENCE:** Senior phase, FET teachers and Teacher educators

**DURATION:** 2 hours

**MAX. NO. OF PARTICIPANTS:** 30

*Studies show that the kind of examples we use, the way we set and sequence them, the way we name and talk about them together with what we accept or ignore as explanation and justification of the procedures we do with them and the nature of learners' participation during the lesson, greatly influence not only learners' understanding of the topic of the lesson but also the nature of mathematics that is communicated to them. It is the objective of the workshop to bring all these elements into focus so that teachers can consider them when planning and implementing their lessons. The workshop will feature a sample lesson on quadratic inequality. One of the presenters will teach the lesson with participants acting as learners. The participants and the workshop facilitators will then analyse the lesson using the analytic tool developed by Wits Maths Connect Project. The tool highlights the key elements of mathematics lessons the project recommends teachers should focus on in teaching.*

## **MOTIVATION FOR WORKSHOP**

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## CONTENT OF THE WORKSHOP

The workshop will feature a sample lesson on quadratic inequality. One of the presenters will teach the lesson with participants acting as learners. The lesson will then be analysed using the analytic tool developed by Wits Maths Connect Project. The tool highlights the key elements of mathematics lessons the project recommends teachers should focus on in teaching.

Proposed allocation of activities

Introduction of WMCS project and overview of the workshop	10 min
Q&A about the Analytic Tool	20 min
Sample teaching of quadratic inequality	30min
Reflection and Analysis of the lesson using the tool (in small group)	40 min
Big group discussion and wrap up	20 min

## GUIDE QUESTIONS FOR GROUP DISCUSSION

1. What do you think was the main object of the lesson?
  2. What examples were used in the lesson? What kind of tasks were the learners asked to do?
  3. How would you describe the explanations made by the ‘teacher’ and the ‘learners’?
  4. How would you describe the interaction in the ‘class’?
  5. In what ways and how do the examples, explanations, and class interaction promote the object of learning?
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