

Tackling the gender gap in mathematics with active learning methodologies

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Summary

- Policy evaluation
- Policy: mathematics active learning program
 - 15 hours
 - 3rd year students
 - Substitutes regular classes
- Methodology: Random allocation to classes within schools
- Positive effect on girls but not on boys => reduction of the gender gap in mathematics performance

Comments

- Paper is well written and well thought! Difficult to discuss! (It has a “Limitations of the study” section!)
- The new methodology includes many aspects: peer interaction, sharing of ideas, learning from mistakes, and problem solving
 - Which one is effective?
- The treatment classes work on numeracy and the tests are on numeracy, what are the control classes working on?
- The tutors have a high level of education compared to regular teachers, what about the effect of better teachers?

Other comments

- Clusters should be done at the school level but too few
- Why schools apply with more than two classes?
- Are the treatment and control groups balanced in terms of performance in Invalsi test in second grade?
- Magnitude of the effects is huge (40%)
- Clarify footnote 30 on the relation between measurement error in the outcome and number of controls

Suggestions

- Address the heterogeneity of the treatment by number of attended sessions
- Multiple hypothesis testing in the balance test (instead of arguing three unbalanced characteristics out of 30 are reasonable)
- Use Invalsi tests in second grade to do additional balance test