

Supporting Teacher Autonomy to Improve Education Outcomes

Experimental Evidence from Brazil

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Main findings

- ✓ The code ran in a new computer
- ✓ All the code outputs are stable over successive runs of the code
- ✓ All results that do not use restricted-access data were reproduced by the code

System specifications

Results were attempted to be reproduced in a computer with the following specifications:

- OS: Windows 10 Enterprise, version 21H2
- Processor: Intel(R) Core(TM) i7-8665U CPU @ 1.90GHz 2.11 GHz
- Memory available: Example: 15.8 GB
- Software version: Stata 17.0

List of exhibits and reproducibility status

Results in the Main Section of the Paper

- **Table 1: Sample** All numbers in the table reproduce.
- **Table 2: Balance Table** The randomization inference takes about a week to run and have therefore not been included in this reproducibility check.
- **Table 3: Impact on Student Learning** All numbers in the table reproduce.
- **Table 4: Impact on Student Progression Rates** All numbers in the table reproduce.
- **Figure 1: 6th Grade Retention and Student Attainment** The graphs and all numbers in the graphs reproduce.
- **Table 5: Impact on Probability of Teacher Staying in the Same School** All numbers in the table reproduce.



- **Table 6: Impact on Student Learning and Progression by Teacher Turnover at Baseline** All numbers in the table reproduce.
- **Table 7: Impact on Other Grades in 6th Grade Treated Schools** All numbers in the table reproduce.
- **Table 8: Impact on Socio-Emotional Skills** All numbers in the table reproduce.
- **Figure 2: Implementation by Grade** The graph and all numbers in the graph reproduce.

Results in the Appendix A

- **Figure A1: IDEB in Rio Grande do Norte vs. Other Brazilian States, 2015** The graph reproduces.
- **Figure A2: Grade Repetition and School Dropout Rates by Grade in Rio Grande do Norte** The graphs and all numbers in the graphs reproduce.
- **Figure A3: Allocation of Resources by Type of Grant** The graph and all numbers in the graph reproduce.
- **Figure A4: Geographical Distribution of Schools by Treatment Status** Reproducing the graph require API keys and is therefore not done.
- **Figure A5: IDEB by Participation to Socio-Emotional Test and Treatment** The graph and all numbers in the graph reproduce.
- **Figure A6: Quantile Treatment Effect on Average Test Score in 6th Grade** The graph and all numbers in the graph reproduce.
- **Figure A7: Impact on Average Test Score by Gender in 6th Grade** The graphs and all numbers in the graphs reproduce.
- **Figure A8: Scatter Plot of Cognitive and Socio-Emotional Skills** The graphs and all numbers in the graphs reproduce.
- **Figure A9: Learning Gains in 6th Grade Rescaled to SAEB – Projection over Time** The graphs and all numbers in the graphs reproduce.
- **Figure A10: Learning Gains in 6th Grade Rescaled to IDEB – Comparison with Other Brazilian States** The graph almost reproduces. The bar for the state of interest reproduces, but the order and values of some other states differ slightly. Nothing that changes the main story though. The number in the graph reproduces.

- **Table A1: Effect of Teacher Permanence on Education Outcomes in Brazil** Gray The data set is not included in the randomization package.
- **Table A2: Balance in Socio-Emotional and Proficiency Test Participation** The randomization inference takes about a week to run and have therefore not been included in this reproducibility check.
- **Table A3: Balance Table on Subsample of Schools with Socio-Emotional Test Takers** The randomization inference takes about a week to run and have therefore not been included in this reproducibility check.
- **Table A4: Balance Table on Subsample of Schools with Proficiency Test Takers** The randomization inference takes about a week to run and have therefore not been included in this reproducibility check.
- **Table A5: Impact on Student Progression Rates – Heterogeneity by Gender** All numbers in the table reproduce.
- **Table A6: Impact on Student Progression Rates – Heterogeneity by Passing Rate at Baseline** All numbers in the table reproduce.
- **Table A7: Impact of 6th Grade Retention on Student Achievement** All numbers in the table reproduce.
- **Table A8: Drivers of Implementation** All numbers in the table reproduce.
- **Table A9: Impact on Probability of School Obtaining the Clearance Certificate** All numbers in the table reproduce.

Results in the Appendix B

- **Figure B1: Learning Gains in 6th Grade Rescaled to Annual Wage** The graph reproduces.

Results in the Appendix C

Online appendix and not included in the Working Paper. Therefore not included in this reproducibility check.