The impact of teachers' "mindsets" on student learning:

New evidence from Rio de Janeiro

Presentation at CIES 2022, Minneapolis 4.21.22

Prof. Tassia Cruz, Principal Investigator, Fundação Getulio Vargas (FGV) Ariana Britto Research Associate, FGV Barbara Bruns RISE, Georgetown Univ., Center for Global Development



Context



Increasing global research on the impact of "mindsets" – or beliefs about the malleability of brain development – on behavior (perseverance) and learning outcomes

Rio municipality: Second largest school district in Brazil, with high poverty rate

1,543 schools

634,000 students 38,000 teachers

Carol Dweck research on theories of intelligence and neuroplasticity

Individuals' beliefs about whether intelligence is fixed or malleable affect their response to intellectual challenges and capacity to learn (Dweck 1986; 2000; Blackwell, Trzesniewski and Dweck 2007)

"Fixed" Mindset : intelligence is an innate quality and immutable



"Growth" Mindset : The capacity of the brain is malleable and Intelligence grows with academic effort

Research questions

- What do primary school teachers in Rio believe about "fixed" or "growth" mindsets?
- Can a short-term (five week) training/coaching program change teachers' beliefs?
- Do changes in teachers' mindsets translate into changes in their teaching practice?
- Do changes in beliefs and teaching practices change their students' learning outcomes?
- Are some types of students impacted more than others?



Mindset training sessions:

School based, 2 hour session/week, over 5 weeks

Coaches presented research evidence, stimulated open discussion and gave teachers practical exercises to try out with students



What are examples of your negative thinking? What are examples of positive thinking? What would you do facing this situation/challenge?

Randomized trial of program in 2019

Paired randomization of primary schools with at least one 5th grade class 89 treatment schools 89 control schools 274 teachers (treatment and control)



Data collected:

Surveys of students' and teachers' mindsets - translated instruments from Dweck and Al-Fattah (Implicit Theory of Intelligence scale) and Marlowe-Crowne (Social Desirability Scale Items)

Classroom observations at end of school year using TEACH + instrument Student test scores on national assessment at end of year

Rio students' "mindset" on pilot questionnaires



Questionário aplicado em alunos 5º ano do EF da rede municipal de ensino do Rio de Janeiro. Tradução própria de Abd-EI- Fattah & Yates (2006) "Growth mindset" more common in higher SES students

Typical questions (globally validated):

"You are born with a fixed amount of intelligence and there's nothing you can do to change it"

"When my teacher shows us new material, I usually think I won't be able to learn it."

Teachers' mindsets pre-intervention

 ~70% of teachers showed a growth mindset, both in connection with their own intelligence and their expectations of their students (comparable to results in Chile and US)

But...

- In earlier survey, only 8% of 5th grade teachers believed that "almost all" of their students will go to university
- A cross-section regression found that teachers' expectations of lower income and black students were significantly lower

Data collection: November 2019



23 certified observers

274 5th grade classrooms

152 schools

RESI JITS

S .10

00

.01 151.68 .

19:00

16° VEL

249-21

17

17 ST IN

.69.2

550

210

001

5.21

40.53.53 5N 13-626

18:3901 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:000121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:00121 13:000121 13:000121 1

59.° 400

30801

92.

01.000

25

8.

98 gl . 1

egg cyl

88.80 x x x x x

V15-09

61 69 8

GL0.22 01.09

120.90

28.05

11:09

886.81

100

07.6

1.08 1.09.09 5.09.05.09.09

30

20

200

1.114

1. 10 Ch. 1.

01.00

46. 600 16. 900 155. 105

09.131

19. 19. 19.

50. 20 . T

0. 0. 7. C.

11.189

50

80.11

091

5.61.5

595

151

10.522

81.25. 100

158

A1. 15. 15. 22.

SI

68.25.12.

39.889

00. 12 ds

63.032

2000

920

13-291

55

988

18.0

19.198

63.03, 131.036, 131.06 23.03, 131.036, 131.06 23.03, 131.036, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.03, 131.06 23.05, 131.06 23.05, 131.06 23.05, 131.06 23.05, 131.06 23.05, 131.06 23.05, 131.06 23.05, 131.06 23.05, 131.06 23.05, 131.06 23.05, 131.06 23.05, 131.06 23.05, 131.06 23.05, 131.06 23.05, 131.06 23.05, 131.06 23.05, 131.06 23.05, 131.06 23.05, 131.06 23.05, 131.06 23.05, 131.06 23.05, 131.06 23.05, 131.06 23.05, 131.06 25.05, 131.06 25.05, 131.06 25.05, 131.06 25.05, 131.06 25.05, 131.06 25.05, 131.06 25.05, 131.06 25.05, 131.06 25.05, 131.06 25.05, 131.06, 131.06 25.05, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06, 131.06,

97.891

662

So.

81.382

5

31.918

200

0

25

31.28.13.17 28.13.17 62.31766

2.

2

N

22

17.653

NO2.24

506.51

69.99

- 001

851-14

12 50 0

116.89

151,95

298.11

654

Se.

258.76 688

200

.~

3

VLY

.~

950.07

av

100

22 .0

.ch 50

098

are

19.973

200

5.

2. 10.50

14. 8. 805 28 11

16. 71 18. 193 193

51.919

92.908

12. 12. 321.00 65

67.217

20.10.00

1.878

1 22 . S. 6.

2.21,962

0

85.00 10,02

63.841

69.93

13:01

81.201

50. 55 - 55. 20. 55.

21. 9. 23

2ºs

12.01211

16.99

.02

2750

691.62

.00

020 .0

191-69

Si

3 050,000 80 200 17 SO 50

.18

192.68

200

× × × × × × 1 × 1 × 1 × × × ×

80

10.02

à

300

8.

250

50 . 1. 00. in

121.09

91. 1. 19 0 92. V. 10

SSY

es.

100

10.001

53.020

96.924

e19.64

210

80. 75.278

22. 162 22

100.50

81.23 A. 10.88 A.

30. 2. 20 20. 20 20. 20

3^{1,00} 13¹

82.3

15.528

10.831

65.613

5

65.62

15.780

2000

61.859

35.043

13.65

28.801

34.880

73.10

698.24

50.00 V.

252.28

1000 - 10 - 000 - 10 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 000 - 0

161

10

33

3

10° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° - 20° -

29.61

1. S. 1.

57.322

35.51.08 109 14

00 60 50. 60 50.

16.00

50.200

8.

dr.

2.

84.191

80 96.822

25.24.

32.139.821 3

76.64

09.302

50.00

802

05.00

or.

1.502

04.000

29.989

11.25%

5

1.14

68.511

25.00

30

13.291 2

18.98

N.003

2 38. 22.

98.049 69.952

24.599

00.739

6.

0 22. 4.

0.012

08.123

29.101

1.11

12.632

000

10 23.84

08.351

100

65.570

82.623

66.281

29.00°

0011

2.

51.734

63.129

02.179

1.31. 0. . .

100 ch 10

25.080

31.159

31.12

3 10.00.

63.740

60.103

60.02

P

302

03:00

63:575

8.

2.

10.923

\$

60. 9. 5. 65 M. 60

20

P.

So.

72.910

50. 1. 20 00

1.

10

29. 3

SA SA

8

ZN.

0

1

51.08

1.28

012.08

8 12:00 .000 555-000 200

100

C16

886 50 - CO

260

-00-005

851.14

050

69-62-

1100 1100 P

250 10

NIN'I

10.92

2057

52.25

82.94

54.159

84.145

8°. 1. 18 8°. 189

1. 223

51.014

15.091

1. 88. 1. 189 8. 1. 1. 181. 1. 189 8. 1. 1. 1. 181.

50.50

988

020.10

105 100 VO

160

064.68

510.22

111.09

10°.24

1100

6 20% 01

124

120,00

.c.

620.050

250.05

aly

1. 5. 5. 1. 1. 0°.

VV VV 100.18

225. 25

50

en si

15.721

69.96

36.01

Sol 106.04

Su

. of . of

109.52

S. 69 . 6

010

178.09

6

640

500

2000

606 .01.2

NºS -

2

12.0

620.70

259.11

224

3

3

3 19.548

8 0000

16.572

6.129

67.672

0. '8

30

0

20

200

18

83.100

2

93. 8. 05 TAN 091 195

14.601

11.054

84.859

292

N. 1989

010

14.000

82.894

10.021

5

10.10.25

21.224

51.55

13.278

64.643

11.54

199. 10. 199. 10.

02.199

17.078

3.

6

15. 5° .

8

Did the workshops change teachers' mindsets?

.311 SD increase in teachers' belief in growth mindset on Dweck/Al Fattah instrument (Implicit Theory of Intelligence Scale)



Did the program change teachers' practice?

 No increase in overall time on instruction but 60% increase in "interactive" instruction – question and answer





Did the program change teachers' practice?



Overall change in teachers' scores on TEACH was limited (.269 SD)

But...

Significant changes in "Classroom culture", "Instructional quality" and some elements of SES

- Biggest changes in:
- Treat all students with respect (CC)
- Define behavioral expectations(CC)
- Respond to student needs (CC)
- Acknowledges positive student behavior (CC)
- Provide positive feedback(CC)
- Acknowledges student effort (SES)
- Has a positive attitude towards students' challenges (SES)



Did teachers' mindsets affect their pedagogical practices?



Did the workshops impact students' learning?

Significant gains in		SAEB ¹ Portuguese	SAEB Math	Average Proficiency	IDEB ²							
Portuguese (.2 SD) and Math	Treatment	0.235 [0.520]	0.781 [0.232]***	0.534 [0.298]*	0.774 [0.135]***							
(.7 SD) scores												
Assessment	Ν	138	138	138	138							
About 3	Fixed Effects Pair	Yes	Yes	Yes	Yes							
additional	Fixed Effects Observers	Yes	Yes	Yes	Yes							
months of math	Students' Variables	Yes	Yes	Yes	Yes							
math curriculum	p<0.1; **p<0.05; ***p<0.01 Sources: Standardized values from SAEB 2019 and IDEB 2019 (INEP, MEC), Data collection in November 2019.											

Notes: 1) Basic Education Assessment System (SAEB, in Portuguese); 2) Basic Education of Development Index (IDEB, in Portuguese)

Conclusions



Encouraging evidence that teachers' beliefs in the importance of a "growth mindset" and ability to use practical classroom-based activities and messages to encourage it in their students can be increased with a relatively short training course



Evidence that mindset changes affect teacher practice in ways that promote student learning



Next steps: the program was implemented through online delivery in 2021 (results still being analyzed)

Several other municipal secretariats also want to implement the program in 2023

Finally, a plug for the TEACH + instrument

Key advantages:

- Teach + fully merges TEACH and Stallings instruments and generates all of the same variables on the same scales: data comparable with earlier studies
- Compared with TEACH, TEACH + generates more comprehensive measures of teacher practice and also captures teachers' use of different pedagogical practices and classroom materials
- One week training course to certify observers
- User-friendly program on tablet

Teach + User-friendly tablet based program

	🖪 🞬 🛦 🛡 💿 🔘	🛡 🕑 14:54	🖪 💥 🛦 🛡 💿 🕗	🛡 🕑 14:54
■ ■ ▲ ♥ ○ ④	📋 Teach Plus v1.8.1 OPPEN 📄 1	N. I	📋 Teach Plus v1.8.1 OPPEN	N . E
Observation 1 * What is the teacher doing? Reading Out Loud Demonstration/ Lecture Question and Answer/ Discussion Question and Answer/ Discussion in groups Practice and Drilling Assignment/Class Work	Observation 1 * What material is the teacher using for the activity? No Materials Textbooks Notebooks / Writing Implement Blackboard / Whiteboard Non-digital learning Aids Digital projector Oligital projector		Observation 1 * How many students are not engaged in any learning activity? None One Small Group Large Group All	
Assignment/Class Work in Groups Copying Solution	Classroom computer Students' tablets or laptops Other technological resources			
Discipline Classroom Management with Students Classroom Management Alone Social Interaction between teacher and students Social Interaction with another adult/ Teacher not involved Teacher Out of Classroom	* How many students are engaged in the activity with the teacher? None One Small Group Large Group			
	() All			

10 "snapshots" at evenly spaced intervals that are quick to code in real time in the classroom; 3 screens make this efficient For a 20-30 minute period between snapshots 3 and 8, observers makes notes on TEACH indicators When the TEACH coding is entered on the tablet program, observation is uploaded to server

Completing and coding the observation: 9 TEACH Screens

m											20149					3 14 59					2014					- 0.000	B H A & V Ø				V () 15.00
A. CLASSROOM CULTURE				. 0	•	Ē T	each Plus v1.8.1 OP	PEN		í	3 1. 1	Teach Plus v1.8.1 OPPEN			8 %	. :	Teach Plus v1.8.1 OPPEN			8	N 1	Teach Plus v1.8.1 OPPEN			а	N , 1	Teach Plus v1.8.1 OPPEN			•	$N_{\rm e} =$
1. SUPPORTIVE LEARNING ENVIRONM	IENT					A. CLASSRO 2. POSIT	TIVE BEHAVIORAL EX	PECTATIONS				8. INSTRUCTION 3. LESSON FACILITATION					8. INSTRUCTION 4. CHECKS FOR UNDERSTANDING					B. INSTRUCTION 5. FEEDBACK					6. CRITICAL THINKING				
	N/A: No applica	ot L:Lo ib	w I Me	M: H dium	I: High				L: Low	M: Medium	H: High		L: Low	M: Med	ium H: H	ligh		N/A: Not	L: Low	M:	H: High		L: Low	M: Me	ledium	H: High		L: Lov	v M: Me	dium H	ł: High
* 1.1 The teacher treats all students	le O	0		0	0	* 2.1 The expectati	teacher sets clear b ions for classroom a	ehavioral ctivities	0	0	0	* 3.1 The teacher explicitly articulates the objectives of the lesson and relate classroom activities to the objectives	• •	0	C	2		applicab le	h	Aedium		* 5.1 The teacher provides specific comments or prompts that help clarify	0	C	0	0	6.1 The teacher asks open-ende questions	a 0	C		0
* 1.2 The teacher uses positive	0	0		0	0	* 2.2 The positive s	teacher acknowledg student behavior	ges	0	0	0	* 3.2 The teacher's explanation of content is clear	0	0	C	>	* 4.1 The teacher uses questions, prompts or other strategies to determine students' level of	0	0	0	0	* 5.2 The teacher provides specific	0	0	0	0	6.2 The teacher provides thinkin tasks	• •	C)	0
anguage with students * 1.3 The teacher responds to students	0	0		0	0	* 2.3 The and focus	teacher redirects m ses on the expected	isbehavior behavior,	0	0	0	* 3.3 The teacher makes connections the lesson that relate to other content	in O	0	C	>	* 4.2 The teacher monitors most	0	0	0	0	comments or prompts that help identify students' successes					 0.3 The students ask open-ender questions or perform thinking task 	a () s	C		0
* 1.4 The teacher does not exhibit	0	0		0	0	rather the	in the undesired ber					knowledge or students' daily lives * 3.4 The teacher models by enacting,	0	0	C	>	students during independent/group work														
gender bias and challenges gender stereotypes in the classroom									1 0	0		or thinking aloud					* 4.3 The teacher adjusts teaching to the level of the students	0	0	0	0	* FFEDBACK: Overall score	1	2 3	3 4	5	CRITICAL THINKING: Overall sec	1	2 3	4	5
						+ POSITIV	VE BEHAVIORAL		0 0	0	0 0												Ŭ	0	0	0			0 0		Ŭ
	1	2	3	4	5	EXPECTA	Chowa. Overall scol	•				* LESSON FACILITATION: Overall score	1	2 3 O O	4	5		1	2 3	4	5										
* SUPPORTIVE LEARNING ENVIRONMENT: Overall score	0	0	0	0	0											~	* CHECKS FOR UNDERSTANDING: Overall score	0	0 0	0	0										
																															_

							4 0	<u> </u>				2.01	1500							0.150	
8 W A O V G					TO 1500								1000							0.000	
Teach Plus v1.8.1 OPPEN				٦	N 1	Teach Pl	us v1.8.1 OPPEN				8	Χ.	1	Teach Plus v1.8.1 OPPEN				8	•	-	
. SOCIDEMOTIONAL SKELS 7. AUTONOMY						8. PERSEVERAN	ICE							9. SOCIAL AND COLLABORATIVE SKILL	3						
	L: Low	7 N	V: Mediur	n k	l: Hiah			L: Lo	w	M: Mediu	m I	H: High	h		L: Lo	w	M: Medi	um	H:H	igh	
7.1 The teacher provides students with choices	0		0		0	* 8.1 The teache students' effort	r acknowledges	0		0		0		* 9.1 The teacher promotes students' collaboration through peer interaction	0		0		С		
7.2 The teacher provides students with opportunities to take on roles in	e on roles in		> 0		0	* 8.2 The teache towards students	r has a positive attitude s' challenges	0		0		0		* 9.2 The teacher promotes students' interpersonal skills	0		0		С)	
the classroom	rte O (0		0		* 8.3 The teacher setting	r encourages goal-	0		0		0		9.3 Students collaborate with one prother through near interaction	0		0		0	
participate in the classroom	0		0		0									another an ough peer interaction							
								1	2	3	4	5			1	2	3	4	1	5	
	1	2	3	4	5	* PERSEVERANC	CE: Overall score	0	0	0	0	C	>	* SOCIAL AND COLLABORATIVE	0	0	0	C)	0	
and thereone , unreal score	0	0	0	0	0									DALLS: UVERAI SCOTE							

Observers follow the standard TEACH protocol of going to a quiet place outside the classroom immediately after the class to reflect on their notes, use the Manual and code their observation

TEACH +

3 domains, 27 dimensions

Classroom culture:

Supportive learning environment Positive behavioral expectations Quality of Instruction Lesson facilitation Checking for Understanding Feedback Critical Thinking

Support for Students' Socioemotional Skills

- **Encouraging Autonomy**
- Perseverance
- Social and Collaborative Skills

SCR	HOOL ID:	TEACHER ID:	CODER ID:	GRADE:	SUBJECT:					S	EGM	ENT 1	
CLA	ASS SIZE: girls _	boys	SCHEDULED TIME:	to:	ACTUAL TH	/E:		to : _		SE	GME	NT LENG	TH:
TIME	ON TASK									-			
0.	TIME ON L	EARNING			1# Snepsho	it (4m)		2 nd Snep	shot ((9m)	з	d Snepsha	ot (14m
0.1	Teacher prov	ides learning activity	to most students		Y	T	N	Y		N		Y	
0.2	Students are	on task			N/A L	N	I H	N/A	L	мн	1	V/A L	M
Area	s / Elements / Be	HING PRACTICES					Sport	na					Fine
								,					
	CLASSRO	OM CULTURE							-				
1.	SUPPORTI	VE LEARNING EN	IVIRONMENT					1	2	3	4	5	
1.1	The teacher t	reats all students resp	pectfully					L	_	M	-	н	-
1.2	The teacher u	ises positive languag	e with students					-		M	-	н	
1.3	The teacher r	esponds to students'	needs				N/A	-		M	-	H	-
1.4	The teacher of	toes not exhibit gend	er bias and challenges ge	inder sterectypes in the	lassroom		N/A	L		м		н	
2.	POSITIVE B	BEHAVIORIAL EX	PECTATIONS					1	2	3	4	5	
2.1	The teacher s	ets clear behavioral	expectations for classroor	n activities				L		м		н	
2.2	The teacher a	cknowledges positive	e student behavior					L		M		н	
2.3	The teacher n	edirects misbehavior a	and focuses on the expect	ed behavior, rather than t	he undesired behav	vior		L		м		н	
в.,	INSTRUCT	ION											
3.	LESSON F	ACILITATION						1	2	3	4	5	
3.1	The teacher e	xplicitly articulates the	objectives of the lesson a	ind relates classroom acti	vities to the objectiv	ves		L		M		н	
3.2	The teacher's	explanation of conte	nt is clear					L		м		н	
3.3	The teacher r	nakes connections in	the lesson that relate to	other content knowledge	or students' daily I	lives		L		M		н	
3.4	The teacher r	nodels by enacting or	thinking aloud					L		м		н	
4	CHECKS F	OR UNDERSTAN	DING					1	2	3	4	5	
4.1	The teacher u	uses questions, prom	pts or other strategies to	determine students' level	of understanding			L		м		н	
4.2	The teacher r	nonitors most studen	ts during independent/arc	up work			N/A	L	_	м		н	
4.3	The teacher a	idjusts teaching to the	e level of students					L		м		н	
	FEEDBACK	,						4	2	2	4	5	
5.1	The teacher	vouidae enerific com	mante or promote that ha	In clarify students' misure	deretandinge				4	M	-	4	
5.2	The teacher p	myides specific com	ments or prompts that he	in identify students' succ	assas		-		_	M	-	н	-
-			the second second second					-					-
6.	CRITICAL	THINKING						1	2	3	4	5	
6.1	The teacher a	isks open-ended que	stons					L		M	-	н	-
6.2	The teacher p	provides thinking task	5				-		_	M	-	H	-
6.3	The students	ask open-ended que	stions or perform thinking	LISKS					-	м		н	<u> </u>
C.	SOCIOEM	TIONAL SKILL	5										
7.	AUTONOM	Y						1	2	3	4	5	
7.1	The teacher p	rovides students with	n choices					L		м		н	
7.2	The teacher p	provides students with	opportunities to take on	roles in the classroom				L		M		н	
7.3	The students	volunteer to participa	te in the classroom					L		м		н	
8.	PERSEVER	ANCE						1	2	3	4	5	
8.1	The teacher a	icknowledges studen	ts' efforts					L		M		н	
8.2	The teacher h	as a positive attitude	towards students' challe	nges				L		м	1	н	
8.3	The teacher e	encourages goal setti	ng					L		м		н	
9.	SOCIAL &	COLLABORATIVE	SKILLS					1	2	3	4	5	
9.1	The teacher p	promotes students' co	eaboration through peer	interaction				L L		M	-	н	-
~ ~			the second second second second										

Average Teacher time on instruction over a class hour



TEACH instrument codes teacher time on task in first and last 15 minutes of class

Instructional time typically lowest in these segments

Classificação: Controlado

Restrição de acesso: BNDES, MEC, Fundação Lemann, Fundação Itaú Social, CIEB, FGV/Ceipe, FGV/EPPG, Formadoras TEACH+, Comitê Acadêmico do Otec.



Classroom observation is expensive...

Let's make it as comparable as possible



Thank you! Barbara.bruns@gmail.com