

**Title:** The role of socioemotional learning in teacher induction: A longitudinal study of the CREATE Teacher Residency Program

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## **Background**

Teacher turnover, especially among early career teachers, contributes heavily to widespread teacher shortages around the nation (Ingersoll, 2001; Johnson, Berg, & Donaldson, 2005). This is due in large part to teachers experiencing high levels of job stress and burnout (Stoeber & Rennert, 2008). Teacher support programs have been developed to improve rates of retention. Many of these programs focus on the development of socioemotional skills that help teachers manage stress and prevent burnout. Mindfulness training is one such intervention that shows promising results (Richardson et al., 2008; Roeser et al., 2013). Other supports include increased mentorship and professional growth opportunities (Guha, Hyler & Darling-Hammond, 2016).

## **Purpose**

This work evaluates the impact of CREATE (Collaboration and Reflection to Enhance Atlanta Teacher Effectiveness), a teacher residency program, on new teachers. The findings will inform the program about which aspects are (or are not) effective in preparing teachers with the skills, strategies and mindsets they need to sustain successfully in the profession.

## **Setting**

CREATE is a teacher residency program designed to equip teachers with the socioemotional skills needed to become effective teachers. CREATE is based in Atlanta Public Schools (APS). Participants are recruited from Georgia State University's College of Education and Human Development (GSU CEHD). Data is collected from student teachers while in the final year of their teacher credentialing program and then during their first two years as full-time teachers-of-record. The research study involving the first two cohorts of this study is sponsored by the United States Department of Education's Investing in Innovation (i3) grant. In partnership with the CREATE team and GSU, the project received funding from the Supporting Effective Educator Development (SEED) grant program to continue the study for three more cohorts of teachers.

The study includes five cohorts of participants. We began collecting data in the 2015/16 school year and will continue data collection through the 2021/22 school year (Table 1). This provides a rare opportunity to evaluate a program as it matures over multiple years and cohorts.

## **Intervention**

CREATE's theory of change begins with the idea that teachers must first develop socioemotional skills that include stress management and mindfulness to prepare them for work in a high stress profession. CREATE then posits that these skills will equip teachers with the capacity to mitigate burnout, remain in the profession, and ultimately become effective teachers who can improve student achievement in Georgia public schools. CREATE offers a comprehensive set of supports and programming that includes mentorship and monthly meetings during which residents participate in a compassion-based mindfulness curriculum.

## **Research Design**

Impacts of CREATE are assessed using a quasi-experimental design. The treatment group consists of student teachers who join CREATE and the comparison group are student teachers that go through the same program at GSU, complete their student teaching in APS or surrounding district, but who do not enroll in CREATE.

## **Data Collection and Analysis**

The evaluation relies on several sources of data including 1) survey outcomes that measure Mindfulness, Stress Management and Empathy Related to Teaching, Self-Efficacy in Teaching, Commitment to Teaching, and Resilience, 2) teacher retention, 3) teacher effectiveness, as measured by The Teacher Assessment on Performance Standards (TAPS), a primary component of the Georgia teacher evaluation system, and 4) student achievement in math, ELA, science and social studies as measured by the Georgia Milestones Assessment System.

## **Findings / Results**

The findings addressed in this evaluation are threefold and align with CREATE's logic model: socioemotional skills → teacher retention → teacher effectiveness and student achievement

### *Survey outcomes*

Results for combined cohorts 1 and 2 during their first year as full-time teachers show no impacts across cohorts on the survey outcomes of interest (Table 2). However, we found that impacts vary depending on certain individual attributes assessed at baseline.

A noteworthy finding is that CREATE has a greater positive impact on Mindfulness and Stress Management and Empathy in Teaching among teachers who reported having greater confidence in their teaching skills at the start of the study. We also see that teachers who report less math anxiety at baseline show greater impact of CREATE Stress Management and Empathy in Teaching after the second year of implementation.

### *Teacher retention*

To assess whether CREATE influences retention rates of early career teachers, we compared retention rates in CREATE and comparison participants. Preliminary results for cohorts 1 and 2 indicate a trend with CREATE residents persevering in the profession at higher proportions than their comparison counterparts. Probabilities of graduating from GSU were 94.7% and 95.1% for non-CREATE and CREATE residents, respectively ( $p=.915$  (Chi-squared);  $p=1.000$  (Fisher's exact test)). Probabilities of remaining in teaching after one year were 85.1% and 95.1% for the two groups, respectively, ( $p=.098$  (Chi-squared);  $p=.147$  (Fisher's exact test)). The rates after two years were 84.0% and 92.68%, for the groups, respectively, ( $p=.117$  (Chi-squared);  $p=.271$  (Fisher's exact test)). (Tables 3-5). Additional years of data will be available for the 2020 SREE symposium.

### *Teacher effectiveness and student achievement*

Analysis of teacher TAPS and student Milestones scores will be completed October 2019 and included in the 2020 SREE symposium.

### **Conclusion**

The evaluation began in the 2015/16 school year and since then the program has matured significantly. As an i3 development grant, CREATE has responded to the needs of their teachers and made several programming changes over the years, which include streamlining the mentorship team supporting residents and refining the mindfulness training. The CREATE developers hypothesize that, because of these changes, later cohorts will have positive and more lasting effects. With a longitudinal study following five consecutive cohorts for three years each, we have a unique opportunity to explore impacts and differential impacts both within the same cohort at different timepoints in the program, as well as across cohorts. The CREATE team also posited from the beginning of the i3 grant that impacting student achievement of early career teachers would be challenging. They (and we as the evaluators) have continued to invest in understanding exploratory outcomes (e.g., impact on intermediate outcomes and moderation of impact) to help contextualize the impact and guide improvement of the program.

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**Table 1.** Cohort Sample Size and Timeline for the CREATE Research Study

	<i>SAMPLE SIZE</i>		<i>YEARS OF PARTICIPATION</i>						
	Treatment	Control	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Cohort 1	19	43	Year 1	Year 2	Year 3				
Cohort 2	20	35		Year 1	Year 2	Year 3			
Cohort 3	14	41			Year 1	Year 2	Year 3		
Cohort 4	15	42				Year 1	Year 2	Year 3	
Cohort 5	19	25					Year 1	Year 2	Year 3

The sample sizes are the numbers of recruited participants at baseline. Year 1 represents participants’ first year in the study and student teaching year. Year 2 represents participants’ second year in the study and first year as a full-time teacher-of-record. Year 3 represents participants’ third year in the study and second year as a full-time teacher-of-record.

**Table 2.** Effects in scale score units for five scales

Effect	Scale 1. Self-Efficacy in Teaching	Scale 2. Commitment to Teaching	Scale 3. Stress Management / Empathy	Scale 4. Resilience	Scale 5. Mindfulness
Average impact for Cohort 1 in Year 1	-0.14	-0.09	-0.22	-0.36*	-0.12
Average impact for Cohort 1 in Year 2	-0.33*	-0.12	0.19	-0.21	0.00
Average impact for Cohort 2 in Year 1	-0.06	-0.07	-0.06	-0.24	0.03
Average impact for Cohort 2 in Year 2	0.03	0.00	0.33	-0.16	0.04
Research Question 1: Average impact across Cohorts 1 and 2 in their second year (i.e., Year 2)	-0.15	-0.06	0.26	-0.18	0.02
The difference between Cohort 1 and Cohort 2 in their Year 2 impact	0.37	0.12	0.13	0.05	0.05
The difference in impact between Year 2 and Year 1 for Cohort 2 only.	0.09	0.07	0.38	0.09	0.01
The difference between Cohort 2 and Cohort 1 in the difference in impact between Year 2 and Year 1.	0.29	0.10	-0.03	-0.06	-0.10

Degrees of freedom for estimating the effects are: For Scale 1, 81 for the first and third effects, 54, for the remaining effects displayed. For Scale 2, 82 for the first and third effects, 54, for the remaining effects displayed. For Scale 3, 82 for the first and third effects, 53, for the remaining effects displayed. For Scale 4, 82 for the first and third effects, 54, for the remaining effects displayed. For Scale 5, 73 for the first and third effects, 43, for the remaining effects displayed.

\* $p < .10$ , \*\* $p < .05$ , \*\*\* $p < .001$  ( $p$  values correspond to effect estimates from ANCOVA)

**Table 3.** Completion of teacher residency at GSU

	comparison	CREATE
Did not complete	5	2
Completed	89	39

Chi-squared,  $p=.915$ ; Fisher's exact test  $p=1.000$



**Table 4.** Completion of first year of teaching

	comparison	CREATE
Did not complete	14 (18)	2
Completed	80 (76)	39

Chi-squared,  $p=.098$ ; Fisher's exact test  $p=.147$ ; Numbers in parentheses indicate the minimum reduction in the difference in comparison group proportions that would result in a statistically significant result ( $p<.05$ ) using Fisher's exact test (holding constant the distribution under the CREATE condition). The results do not reach statistical significance at the  $\alpha=.05$  level. However, our assumptions about rates of persistence in teaching among controls (for whom we are still seeking outcomes data) are set conservatively, especially when compared to rates of persistence at the national level after three years.

**Table 5.** Completion of second year of teaching

	Comparison	CREATE
Did not complete	15 (20)	3
Completed	79 (74)	38

Chi-squared,  $p=.117$ ; Fisher's exact test  $p=.271$ ; Numbers in parentheses indicate the minimum reduction in the difference in comparison group proportions that would result in a statistically significant result ( $p<.05$ ) using Fisher's exact test (holding constant the distribution under the CREATE condition). Again, the results do not reach statistical significance at the  $\alpha=.05$  level. However, our assumptions about rates of persistence in teaching among controls (for whom we are still seeking outcomes data) are set conservatively, especially when compared to rates of persistence at the national level after three years.