

An Experimental Evaluation of Multiple Arts Field Trips

Year 3 Results

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Overview

- **Research Question:**

1. Do students experience social-emotional and academic benefits from **multiple field trips** to cultural institutions?
2. Do effects **persist over time following treatment**?

- **Research Design:**

- Randomly assign 4th and 5th graders at 15 elementary schools to **receive 3 culturally enriching field trips** throughout the school year and measure the impact on student social-emotional and academic outcomes.
 - High Museum of Art
 - Alliance Theatre
 - Atlanta Symphony Orchestra

- **What we add to previous research:**

1. Experimental design - what is the **CAUSAL** effect of arts-focused fieldtrips.
2. Multiple trips to 3 different art institutions
3. Large, urban school district serving primarily minority and low-income students
4. Longitudinal study - follow students after they experience treatment

Overview

- **Findings**

- We find no effect on students' desire to participate in the arts nor on social emotional measures of empathy, social perspective taking, and political tolerance
- Treatment students show
 - **Higher desire to consume arts in the future**
 - **Higher levels of tolerance**
 - **Greater conscientiousness**
- Intervention seems to affect students' behavior and academic outcomes most when they enter middle school
 - Treatment students experience
 - **Higher test scores**
 - **Higher course grades**
 - **Fewer behavioral infractions**
 - **Fewer absences**

Motivation:

- **Evidence of cultural field trips declining**

- Increase in schools canceling field trips (Ellerson & McCord, 2009)
- Cultural institutions report fewer student groups attending and that adult attendance at art institutions is also declining (Rabkin & Hedberg, 2010)
- Teachers report decline in arts education and field trips, particularly among disadvantaged students (Government Accountability Office, 2009)
 - Principals reported pressure from accountability standards and tight budgets

Previous literature

- **Observational studies**

- Student involvement in the arts is associated with higher academic performance (Ludwig, Boyle, & Lindsay, 2017; Jægar and Møllegarrd, 2017; Ruppert, 2006;)
- Students who attend cultural institutions experience academic and social emotional benefits in the short term (Lacoe, Painter, & Williams, 2016; RK&A, 2018)

- **Experimental studies (GOLD Standard)**

- Students experience an increase in tolerance, critical thinking, empathy, content knowledge, and desire to consume art from *visiting art museums or theater* (Bowen, Greene, & Kisida, 2014; Greene et al, 2018; Greene et al., 2014; Kisida, Greene, & Bowen, 2014)
- Students in an *arts integration program* demonstrated reduced discipline, increased writing test scores, and increased compassion (Bowen & Kisida, 2019)

Research Question

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- **Hypotheses**

- Expect **positive gains** in social emotional constructs such as tolerance and social perspective taking
- Expect **positive gains** in student desire to consume arts
- Expect **no significant effect** in academic achievement

Research Design: Randomized Control Trial

- **Treatment Group:** Field trips to each of the Woodruff Arts Center art partners
 - High Museum of Art
 - Atlanta Symphony Orchestra
 - Alliance Theatre
- **Control Group:** Business as usual



Research Design: Randomized Control Trial

We estimate the effect of:

- 3 field trips in 1 year
- 6 field trips in 2 years
- 1 year following treatment
- 2 years following treatment

Treatment Assignment in Year 3 by School and Cohort

School	Cohort	Treatment Assignment
School 1	4th	-
	5th	Treatment
	6th	Control
	7th	Treatment- 2yr post
School 2	4th	-
	5th	Treatment
	6th	Control
	7th	Treatment- 2yr post
School 3	4th	-
	5th	Control
	6th	Treatment- 1yr post
	7th	Control
School 4	4th	-
	5th	Control
	6th	Treatment- 1yr post
	7th	Control
School 5	4th	Treatment
	5th	Control
	6th	Treatment- 1yr post
	7th	Treatment- 2yr post
School 6	4th	Treatment
	5th	Control
	6th	Treatment- 1yr post
	7th	Treatment- 2yr post
School 7	4th	Treatment
	5th	Control
	6th	Treatment- 1yr post
	7th	Treatment- 2yr post
School 8	4th	Control
	5th	Treatment- double dose
	6th	Control
	7th	Treatment- 2yr post
School 9	4th	Control
	5th	Treatment- double dose
	6th	Control
	7th	Treatment- 2yr post
School 10	4th	Control
	5th	Treatment- double dose
	6th	Control
	7th	Treatment- 2yr post
School 11	4th	Treatment
	5th	Control
	6th	Treatment- 1yr post
	7th	Treatment- 2yr post
School 12	4th	Treatment
	5th	Control
	6th	Treatment- 1yr post
	7th	Treatment- 2yr post
School 13	4th	Treatment
	5th	Control
	6th	Treatment- 1yr post
	7th	Treatment- 2yr post
School 14	4th	Control
	5th	Treatment
	6th	Treatment- 1yr post
	7th	Treatment- 2yr post
School 15	4th	Control
	5th	Treatment
	6th	Treatment- 1yr post
	7th	Treatment- 2yr post

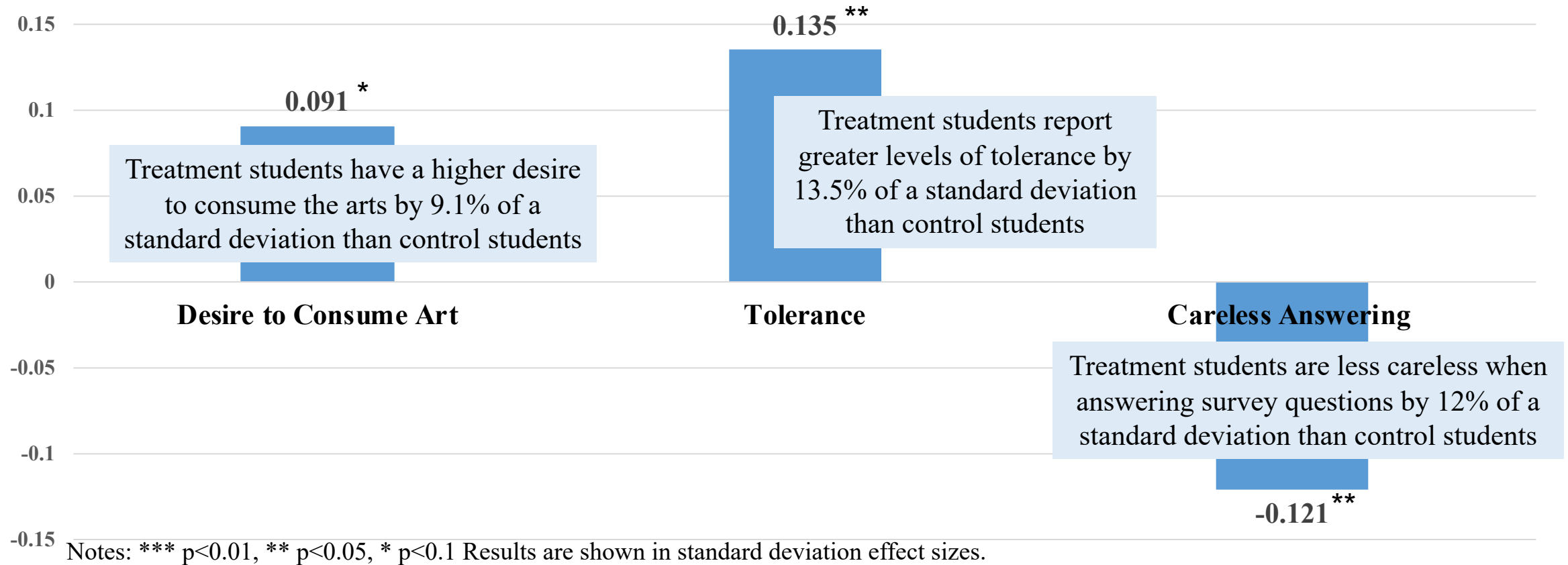
Cohort 1
Cohort 2
Cohort 3

Data

- 15 elementary schools in a large urban school district
 - Approximately 2,000 Students
- Student Surveys
 - Interest in art consumption and participation
 - Social emotional measures
 - School engagement
 - Conscientiousness- Survey effort
- Administrative records
 - Georgia Milestones
 - Courses and grades
 - Attendance records
 - Discipline records

Results: Art Consumption & Tolerance

Treatment Effect of Students Desire to Consume Art and Tolerance



Desire to Consume Art: Combined scale of desire to attend art museums, symphony performances, and live theater

Tolerance: *“I believe people can have different opinions about the same thing.”*

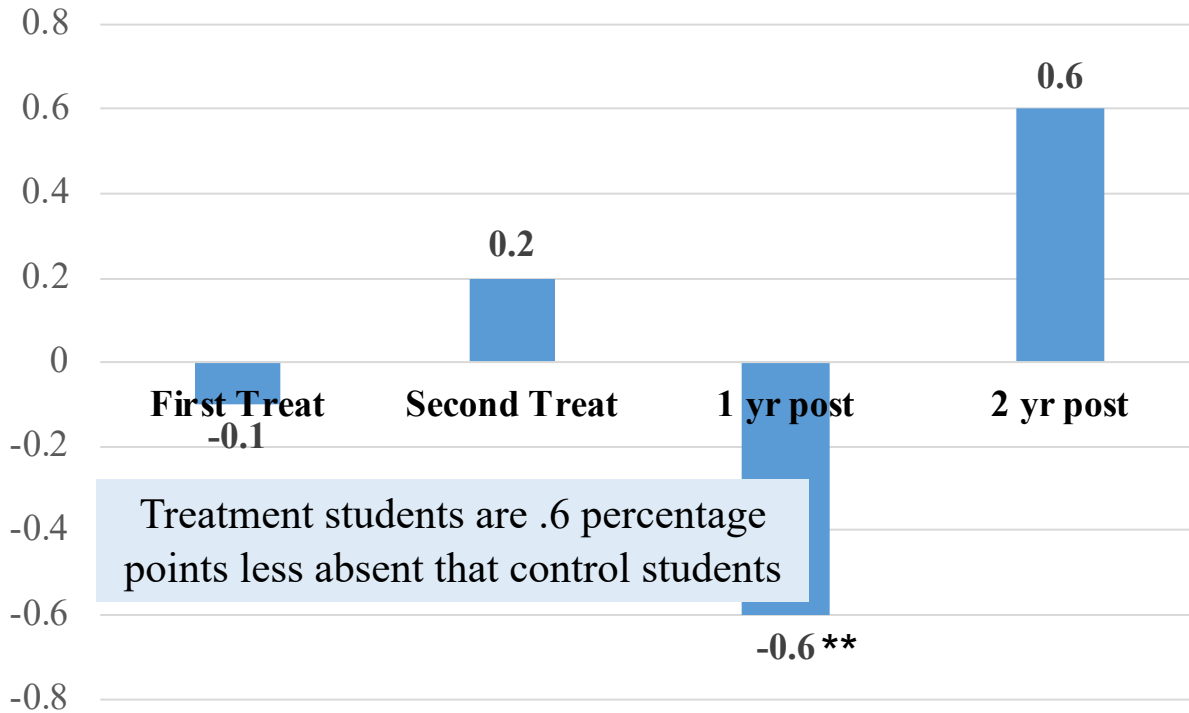
Careless Answering: Survey effort measure

Summary: Art Consumption & Tolerance

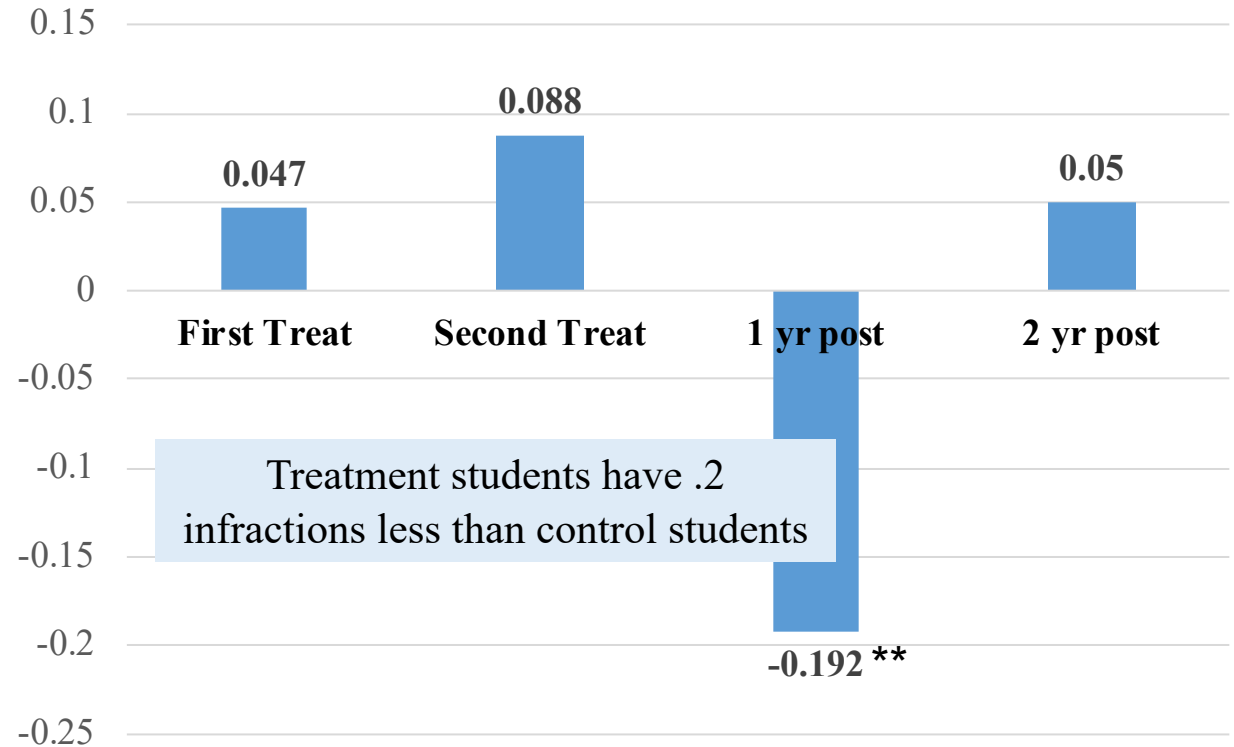
- Treatment students express a **greater desire to consume arts, greater tolerance, believing people can have different opinions, and are more conscientious** than control group students
- Treatment effects are measured in the same year as treatment
 - We only have survey data from all 3 cohorts in the first year of treatment
- We see **no effect** on other social emotional outcomes of empathy and social perspective taking
 - Evidence that students had difficulty understanding questions on the survey
 - Finding no effect doesn't mean that the treatment did not affect students on these outcomes, but that we may be unable to detect the effect

Results: Behavioral Outcomes

Treatment Effect on Student Absences



Treatment Effect on Behavioral Infractions



Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Results are shown in standard deviation effect sizes. Georgia Milestone scores as well as course grades were standardized within grade level.

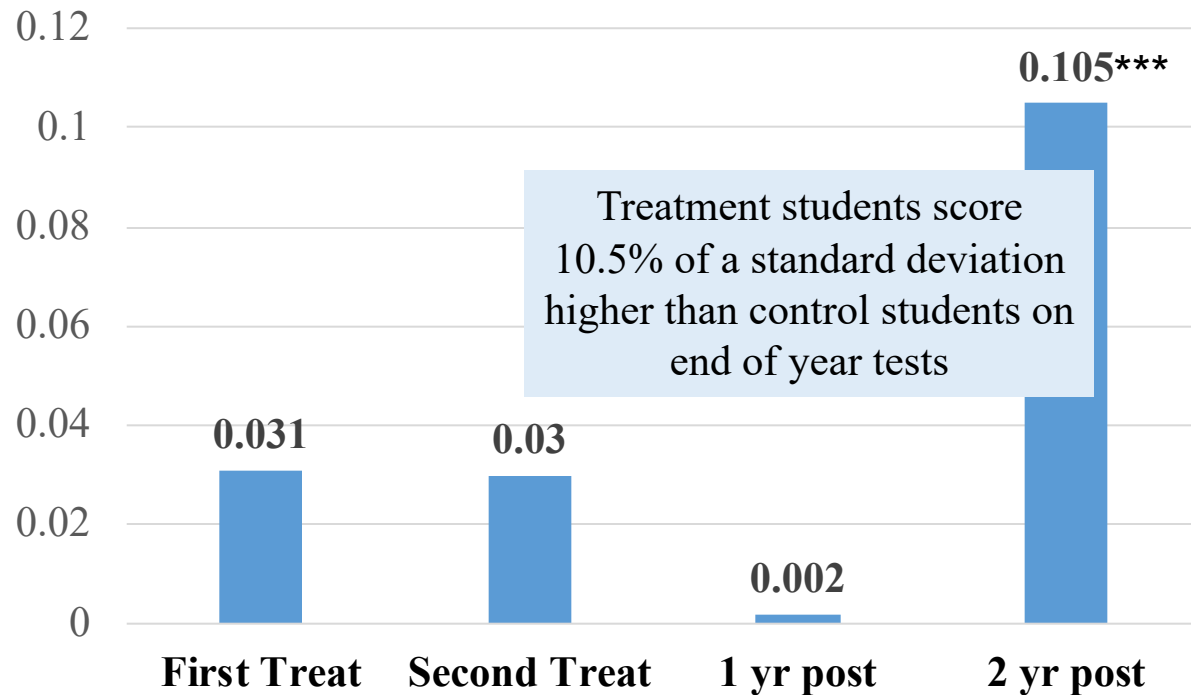
First Treat indicates if a student received treatment in one year, and *Second Treat* indicates if a student received treatment two year in a row.

Summary: Behavioral Outcomes

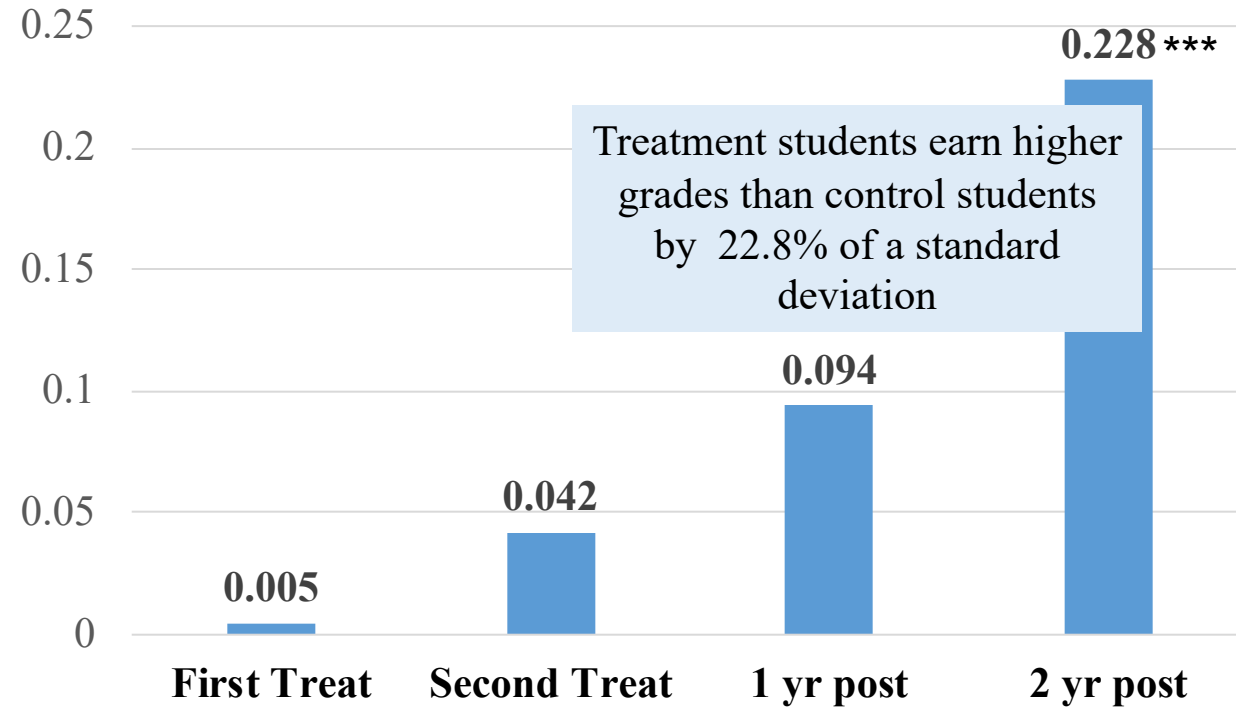
- We find significant behavioral differences between treatment and control group students once they enter middle school
- Treatment students have **fewer infractions** and are **absent less often** than control students
- The pattern across treatment conditions is mixed
 - Prior to 6th grade, students have few reported infractions
 - Treatment effect estimates are imprecise

Results: Academic Outcomes

Treatment Effect on Georgia Milestones



Treatment Effect on Course Grades



Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Results are shown in standard deviation effect sizes. Georgia Milestone scores as well as course grades were standardized within grade level.

First Treat indicates if a student received treatment in one year, and *Second Treat* indicates if a student received treatment two year in a row.

Summary: Academic Outcomes

- We find significant test score and course grade differences between treatment and control students once they enter middle school
- Treatment students **score higher on the Georgia Milestone** end of grade exams and have **higher course grades** than control group students
- The pattern across treatment conditions is consistent
- Some evidence that these effects may be concentrated in cohort 1 students

Takeaways

- First experimental study to find positive effects on student behavioral and academic outcomes from attending arts-focused field trips
- First study to show effects multiple years past treatment
- Some evidence that treatment effects are concentrated for students in cohort 1
- The treatment is a relatively low-touch intervention, so the fact that we see positive results is significant
- **Next Steps**
 - Inside the Black Box: Understanding teacher and student experiences with field trips
 - Teacher focus groups
 - Working with a handful of schools in the study to better understand teachers' perspective of the intervention
 - Student interviews
 - Talking with students to understand how the intervention impacted them beyond what we capture in survey data

Supplementary Information

Sample Survey Items: *Art Consumption*

- If your friends or family wanted to go to an art museum, how interested would you be in going?
- Visiting art museums is fun.
- I plan to visit art museums when I am an adult.
- Art is interesting to me.
- I feel like I don't belong when I'm at an art museum.
- I feel comfortable talking about art.
- I would tell my friends that they should visit an art museum.
- Do you think your friend would enjoy a field trip to an art museum (such as the High Museum of Art)?

Sample Survey Items: *Social Perspective Taking*

- How often do you attempt to understand your friends better by trying to figure out what they are thinking?
- How often do you try to think of more than one explanation for why someone else acted as they did?
- Overall, how often do you try to understand the point of view of other people?
- How often do you try to figure out what emotions people are feeling when you meet them for the first time?
- In general, how often do you try to understand how other people view the situation?