

This paper will remain under media embargo until 5 a.m. CST on Thursday, December 7, 2017.

HOW HAVE NEW ORLEANS' CHARTER-BASED SCHOOL REFORMS AFFECTED PRE-KINDERGARTEN?

.....

By **Lindsay Bell Weixler**, *Tulane University*,
Jane Arnold Lincove, *University of Maryland - Baltimore County*,
and **Alica Gerry**, *Tulane University*

Overview

In this study, we examine how the growth of charter schools in New Orleans affected pre-kindergarten (pre-K) program offerings as the school system transitioned from a centralized school system to an almost-all-charter district. In Louisiana, charter schools can opt into offering state-subsidized pre-K for low-income and special-needs students, but the per pupil funding level is far below the average cost of educating a pre-K student. In New Orleans' decentralized setting, schools offering pre-K must cover this funding gap from other sources of revenue.

School districts and charter schools have different incentives for offering optional educational services, such as pre-K. In order to better understand school-level decision making, we interviewed school leaders about their reasons for offering or not offering pre-K. We also analyzed data from 2007 to 2015 to determine whether charter schools that offer pre-K programs gain a competitive advantage over those that do not. Our key findings are:

- After the reforms, the number of schools offering pre-K and the number of school-based pre-K seats dropped, even after accounting for drops in kindergarten enrollment. The decrease in seats occurred primarily in charter schools.
- At charter schools that continued to offer pre-K after Katrina, school leaders offered two school-centered motivations – pursuit of higher test scores and early recruitment of families committed to sticking with the school for the long-run – in addition to more mission-focused commitments to providing early education for the benefit of students and the community.
- Through analyses of student test scores from 2012 to 2015, we find that offering pre-K had no measurable effect on charter schools' third-grade math or ELA test scores, potentially as a result of high student mobility between pre-K and third grade.
- Charter schools that offered pre-K programs saw short-term, but not long-term, enrollment benefits. On average, charter schools with pre-K filled half of their kindergarten seats with existing pre-K students, whereas schools that did not offer these programs had to fill all kindergarten seats with new students. However, charter schools offering pre-K did not have any advantage in persistent student enrollment after kindergarten.

For more detail on this analysis, see the corresponding technical report: Weixler, Lindsay, Jane Arnold Lincove, and Alica Gerry. "The Provision of Public Pre-K in the Absence of Centralized School Management." Education Research Alliance for New Orleans, 2017.

It is important to emphasize that our results do not speak to the important and cost-effective benefits of pre-K for students, as those have been well established in prior research. Rather, the study is meant to show how charter-based reforms influence how and why pre-K and other optional educational programs are offered in almost-all-charter systems. While we discuss below new efforts to address the shortfall of pre-K seats, our study provides initial evidence that decentralization without offsetting financial incentives can lead to reduced investments in programs that advance the broader social goals of public education.

BACKGROUND

Over the past quarter century, charter schools have grown as a share of publicly funded schools in the United States, particularly in urban areas. As a result, school districts where these independently managed schools are prominent have become decentralized, with many decisions made at the school level, rather than the district level. While theory suggests that charter schools provide healthy competition for traditional public schools and increase school options for families, the decentralization of school districts may affect how and whether optional services like afterschool programs, academic enrichment, or pre-K classes are offered.

In a centralized school district, optional services are typically allocated to schools and students by the district. This means that funding, facilities, and other resources can be pooled across the district. Pre-K or other interventions and enrichment might be offered to selected high-need students on selected campuses, but no matter where these children go to school, the benefits will accrue to the district at large.

In a decentralized setting, decision-making and funding occur at the school level. Autonomous schools, with control over their own finances and programming, are partly motivated to invest in services that provide internal benefits to the school. If students can easily transfer to other schools, they might carry the benefits of a school's investment with them, reducing the incentive for the school to provide services. This issue is exacerbated by decentralized financing. Compared to large districts, charter school operators are limited in their ability to leverage funds to support optional services. When we add the rigorous test-based accountability applied in many charter school settings, there is an additional motivation to invest scarce resources in programs with more immediate effects on test scores. Pre-K is one example of a program with proven long-term benefits for students that might not have sufficient short-term payoffs for schools facing accountability pressures.

“ *Pre-K is one example of a program with proven long-term benefits for students that might not have sufficient short-term payoffs for schools facing accountability pressures.* ”

In this study, we examine how the growth of charter schools in New Orleans has affected the supply of optional services, focusing on pre-K program offerings. We use the example of pre-K because existing research literature, as well as state and federal policy, recommend pre-K as an important and cost-effective educational intervention. Preschool programs have been linked to future academic gains for children, as well as other long-term benefits such as reduced criminal activity, higher educational attainment, and lower dependence on public assistance. Importantly, many of the expected benefits of pre-K are realized later in life, making it a good long-term investment for society. However, schools that offer pre-K programs, though they may have immediate benefits in the form of early recruitment of families and improved kindergarten readiness, likely have more limited long-term benefits in a district with highly mobile students.

Louisiana has multiple funding streams for pre-K programs. The largest program (funding about 16,000 children statewide) is known as LA4 and provides per-pupil funding (currently \$4,580) to local education agencies, which apply in advance for seats for low-income children. The state also provides funds to districts through a block grant referred to as 8(g), which districts can choose to use for pre-K programs. Finally, federal IDEA funds cover the cost of pre-K for students with special needs. Beyond these streams, public schools and districts funding pre-K must use other general sources of revenue, like federal Title I dollars, privately raised funds, or other local streams. The state also provides separate funding for pre-K seats in private schools and centers, but this study focuses on publicly funded charter schools.

Prior to Hurricane Katrina, the Orleans Parish School Board used both state and federal funding to operate early childhood programs with pre-K seats at most elementary schools across the city. Though Orleans Parish only had about 400 state-funded pre-K seats, the district supplemented state funds with federal Title I dollars to operate the program, and as long as children remained in Orleans Parish, any educational or social benefits of these investments were realized within the school system. After Hurricane Katrina, schools taken over by the state Recovery School District and subsequently contracted as charter schools retained the option to offer state-subsidized pre-K seats at their school sites and had the same state and federal funding available.

Charter operators were not required to enroll their allocated pre-K seats, and if they chose to offer pre-K, they would need to make up the funding gap within the school's budget. With limited resources and pressure to improve standardized test scores, charter schools might offer pre-K only if school leaders perceive an internal benefit (e.g., improved test scores in later grades, increased student retention, or fulfillment of a school's mission to address educational inequity) large enough to justify allocating funds to meet the funding gap. The box below shows just how large these funding deficits can be.

Estimated Cost for Four-Year-Old Pre-K (One Year, One Child)	\$7,700 to \$11,500
2014-15 Per-Pupil State Subsidy for LA4 (Four-Year-Old Pre-K)	- \$4,580
School-Level Gap to be Covered by Other School Funding Sources	\$3,120 to \$6,920

This study examines changes in citywide pre-K offerings from 2001 to 2015 and potential benefits to schools from offering pre-K. Specifically, we address two main questions:

1. How has the transition from a centralized school district to an almost-all-charter setting affected the supply of public pre-K programs in New Orleans?
2. Do charter schools that offer pre-K programs perceive and experience a competitive advantage over those that do not offer pre-K?

HOW DID WE CARRY OUT THE ANALYSIS?

We used two methods to answer our questions: statistical analysis of student-level data provided by the Louisiana Department of Education (with student names removed), and interview data we gathered through ten case studies. In our first quantitative analysis, we used enrollment data from 2001 to 2015 to track the number of pre-K students enrolled in public schools in New Orleans as almost all of the schools shifted to charter management.

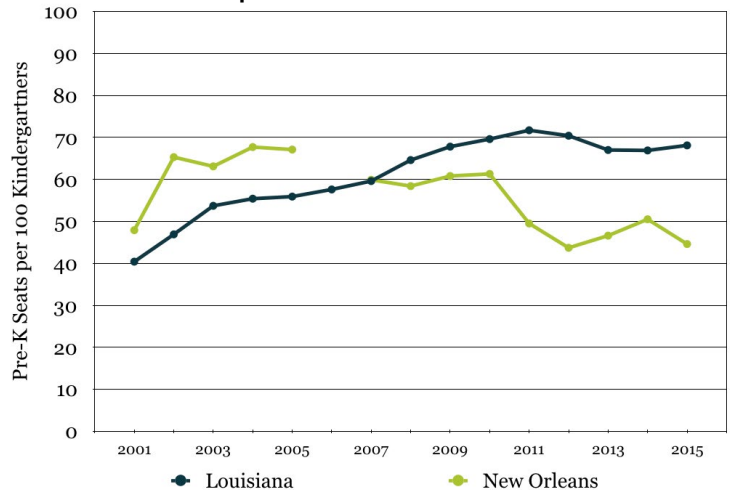
We then interviewed school leaders to better understand the motivation for charter schools to provide pre-K in this decentralized setting. Our sample of 10 New Orleans' school leaders oversaw 19 charter schools: nine that have offered pre-K since opening, four

that have added pre-K since opening, three that discontinued their pre-K programs, and three that never offered pre-K. Our final analyses used regression methods to estimate whether and how offering pre-K benefited schools in the short and long term.

HOW HAS THE TRANSITION FROM A CENTRALIZED SCHOOL DISTRICT TO AN ALMOST-ALL-CHARTER SETTING AFFECTED THE SUPPLY OF PUBLIC PRE-K PROGRAMS IN THE CITY?

We find that the number of school-based pre-K seats dropped substantially after the post-Katrina school reforms (Figure 1). Specifically, we compare the number of public school pre-K students to the number of public school kindergartners, so we can be sure that any changes in trends did not reflect changes in the number of pre-K-age students.

Figure 1. Pre-K seats in New Orleans' publicly funded schools decreased after the post-Katrina school reforms.



Note: 2006 omitted from the New Orleans line due to Hurricane Katrina.

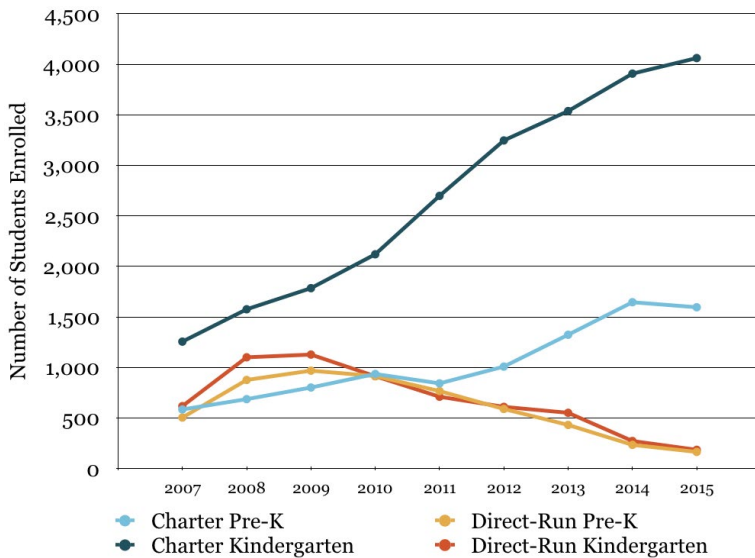
Immediately prior to Hurricane Katrina, New Orleans public schools enrolled 67 pre-K students for every 100 public-school kindergartners. In 2006, New Orleans public schools re-opened, half under the direct control of the district or state and half charter, with approximately 60 public school pre-K students per 100 kindergartners. As the district transitioned to an almost-all-charter system, we see a sharp decline to a low of 44 public school pre-K seats per 100 kindergartners in 2012. Public school pre-K seats remained at this level through 2014-15, and preliminary data indicate a similar level today. It is important to note that Figure 1 only reflects trends in pre-K seats in publicly funded schools, not

seats in any other sector (Head Start, private centers, etc.). However, we find no evidence that pre-K seats in other sectors made up for the decline in public-school pre-K seats over this time period.

The drop in public-school pre-K seats is not explained by state policy changes, as the availability of pre-K subsidies to New Orleans increased between 2004-05 and 2007-08, and public pre-K expanded statewide. We also see no indication that parent demand for pre-K programs dropped over this time period. Instead, these results suggest that schools under charter management were choosing not to enroll students in their allocated pre-K seats.

Figure 2 further breaks down the reduction in pre-K seats in New Orleans by school sector. As expected, the number of pre-K students in New Orleans schools run by the district (direct-run schools) largely tracked kindergarten enrollment, but this is not the case with charter schools. The drop in pre-K enrollment coincides with the expansion of the charter sector. For example, from 2010 to 2012, the number of kindergarten seats in charter schools increased by over 1,000, while the number of pre-K seats in charters remained stable. During this period, more than 300 state-allocated pre-K seats, which could have been filled by charter operators, were not filled.

Figure 2. As the charter sector expanded in the years following Katrina, charter schools offered fewer pre-K seats than kindergarten seats.



DO CHARTER SCHOOLS THAT OFFER PRE-K PROGRAMS PERCEIVE A COMPETITIVE ADVANTAGE OVER THOSE THAT DO NOT OFFER PRE-K?

Although many New Orleans charter schools chose not to offer pre-K in post-Katrina years, between 40% and 65% of charter schools

with kindergarten seats did offer pre-K, depending on the year. In interviews, all school leaders identified funding and classroom space as obstacles to offering pre-K. Leaders of schools that did provide pre-K in this setting cited mission-based, academic, and competitive motivations for making the extra investment. First, leaders expected investments in pre-K to lead to increased kindergarten readiness, future ability to work at grade level, and higher test scores in the third grade (the first year that student performance starts to matter for charter contracts and state accountability).

“Leaders of schools that did provide pre-K in this setting cited mission-based, academic, and competitive motivations for making the extra investment.”

Many school leaders also cited competitive reasons for offering pre-K, based in beliefs that it improved kindergarten recruitment and retention of students over time. However, leaders also recognized the risk that their pre-K investments may benefit another school if students choose to leave. Some schools employed specific recruitment strategies to actively encourage pre-K families to return for kindergarten and to enroll older siblings in the school as well.

Beyond internal academic or competitive benefits, the majority of school leaders also discussed their pre-K programs as vital to the school’s mission in a way that transcends costs. Without exception, those overseeing schools with pre-K programs mentioned the academic and socio-emotional benefits of pre-K to the students they serve, using phrases like, “It’s good for the kids,” and, “It’s just the right thing to do.” Five of the seven school leaders overseeing schools with a pre-K expressed that pre-K provision was part of the school’s mission to serve a community in need of early childhood education options.

DO CHARTER SCHOOLS THAT OFFER PRE-K PROGRAMS EXPERIENCE A COMPETITIVE ADVANTAGE OVER THOSE THAT DO NOT OFFER PRE-K?

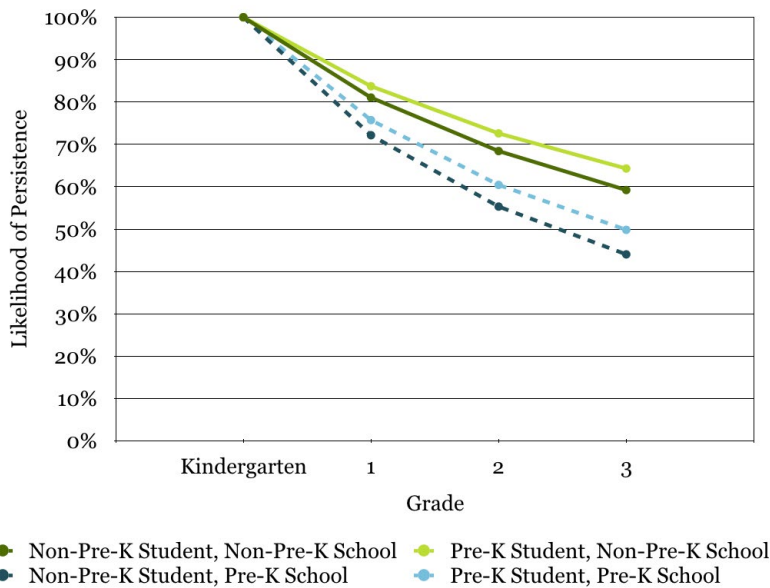
We find little evidence that charter schools benefit in the long run from offering pre-K in terms of later enrollment levels and higher third-grade scores. On average, two-thirds of pre-K students stayed in the same charter school for kindergarten, filling half of

the school's kindergarten seats and keeping their per-pupil funding at their pre-K school. However, this benefit for charter schools was only short term, as just 40% of pre-K students remained in their pre-K school through third grade.

To assess the long-term benefits for charter schools, we examine third-grade test scores and student persistence in the same school from kindergarten to third grade, comparing non-selective charter schools that offered pre-k to those that did not (see the technical paper for details). These analyses follow kindergartners who entered between 2009 and 2012 until they reached third grade. Our analysis of third-grade test scores shows no difference in scores between schools that did and did not offer pre-K, even when controlling for a variety of school characteristics. Students who attended pre-K did slightly outperform non-pre-K students in math, but with high student mobility, this benefit did not translate to the school.

We also estimate the effects of offering pre-K on student retention, comparing student persistence from kindergarten to third grade, for charter schools with and without pre-K (Figure 3). We provide these results for students who started kindergarten between 2009 and 2012 at schools that stayed open until those students reached third grade.

Figure 3. Schools offering pre-K are less likely to keep students through third grade than schools that do not offer pre-K.



Note: Our models can predict the likelihood of persistence vs. exit for students with similar characteristics. Here, we estimate likelihoods for a black, male, FRPL-eligible student who is neither designated for special education services nor gifted. A "pre-K student" attended pre-K at any publicly funded school in Louisiana. A "pre-K school" offered a pre-K classroom in the year prior to the student's kindergarten year.

Figure 3 shows that the persistence rates from kindergarten through third grade are actually lower for schools offering pre-K (the two dashed lines) than those that do not (the two solid lines), and this is true regardless of whether we focus on the specific students who attended pre-K or those who did not.

One possible reason for the lower persistence rates in pre-K schools is that the resources necessary to fund pre-K result in funding reductions for other programs that parents value, leading to higher rates of student exit. Alternatively, this trend could be driven by the types of schools choosing to offer pre-K. However, we find that schools offering pre-K have similar average demographics and school performance scores to schools not offering pre-K, making the second explanation less likely.

LIMITATIONS

One limitation of our data is that we can only observe actual enrollment, rather than the supply of offered seats. However, because the state's LA4 program requires districts and independent charters to apply for those seats in advance, we do have a record of intended LA4 offerings going back to 2004-05. From these data, we know that total public school pre-K enrollment in New Orleans exceeds LA4 offerings in every year.

Our interviews with school leaders revealed confidence in our finding that demand exceeds supply. While one possible explanation for the decline in school-based pre-K seats is an increase in the number of seats being offered in non-school-based programs (i.e., Head Start and publicly funded seats in private centers), our data show that this is not the case. We cannot completely rule out that families in the post-Katrina period were less likely to want their children in school-based pre-K, but this combination of evidence makes that interpretation unlikely.

In estimating the benefits that accrue to schools as a result of offering pre-K, we are also limited in that we can estimate associations but not causality. Because students sort into pre-K non-randomly and schools also choose to provide pre-K non-randomly, our results should not be interpreted as the effects of pre-K programs on students or schools. While our analysis suggests that the above results are probably driven by the pre-K program itself, it could be that the patterns we are observing reflect the characteristics of schools that choose to offer pre-K.

DISCUSSION

We conclude that New Orleans' transition to an almost-all-charter school district resulted in a substantial reduction in school-based pre-K in the city. Our results suggest that insufficient incentives are in place for schools to invest their funds in pre-K in this decentralized setting of highly mobile students. Though charter schools see an initial benefit in reduced need to recruit new kindergartners, high student mobility prevents them from keeping their pre-K students in the long term. Moreover, test-based accountability places strong pressure on charter schools to perform and, while there are signs pre-K improves student academic performance, any benefits to schools' test scores are delayed until students reach third grade and may be diminished at the school level if schools do not retain their pre-K students.

This study is not meant to examine whether or how any other sectors have made efforts to make up for the loss in public-school pre-K seats from 2010-2012. We do know that four-year-old Head Start seats increased over this time period, though the increase did not offset the loss in school-based pre-K seats relative to the population increase.

Policymakers are working to improve the public pre-K system throughout the state. The Louisiana legislature passed Act 3 of 2012, which requires centralized oversight of all publicly funded early childhood education programs, including school-based pre-K, Head Start, and private schools and centers receiving public funds. As a result, the New Orleans Early Education Network (NOEEN) was established in 2013 to coordinate the city's publicly funded early care and education programs. Though these efforts improve aspects of the public early childhood education system, they are not meant

to address the problem of school-based pre-K incentives, and as of 2017, there were still only 44 school-based pre-K seats for every 100 kindergartners in New Orleans.

The recentralization of some educational services has been an important part of the evolution of school reform in New Orleans. Initial problems with the decentralization of authority over student enrollment, truancy prevention, student expulsions, and dropout recovery led to reforms that brought authority back to the district level. In these cases, recentralization was implemented to improve delivery and equity. If policymakers want to increase school-based pre-K seats, more centralized oversight might be necessary in this case as well.

Although our study focuses on pre-K only, this is just one of many examples of optional services where proven benefits occur for students, families, and communities but may be difficult to observe at the school level. Other beneficial services, like afterschool programs, enrichment, and adult education, might be at even greater risk in a decentralized system.

The New Orleans experience suggests that policymakers must consider how and where decentralization might lead to the reduction or elimination of services that provide benefits beyond the immediate school setting. Our study provides initial evidence that decentralization without offsetting financial incentives can lead to reduced investments in programs that advance the broader social goals of public education.

How is this Research Related to Other ERA-New Orleans Studies?

This report is the first in a long series on the intersection of school reform and early childhood education. In our ongoing work, we are examining the new centralized enrollment system for early childhood education programs, including how parents choose among early childhood programs, how available quality ratings influence parents' preferences, and how to support parents through the application process. We are also exploring ways to measure the impact of program attendance on children's short- and long-term outcomes.

This report is also an example of the broader challenge of carrying out activities that require system-level coordination within a decentralized school system. In another report, we provide a more general discussion of systemwide problems that are likely to require [more centralized solutions](#). The report also describes some of the efforts the state has taken in areas like student enrollment, truancy, drop out, and teacher supply.

About the Education Research Alliance for New Orleans

The mission of the Education Research Alliance for New Orleans (ERA-New Orleans) is to produce rigorous, objective, and useful research to understand the post-Katrina school reforms and their long-term effects on all students. Based at Tulane University, ERA-New Orleans is a partnership between university-based researchers and a broad spectrum of local education groups. Our Advisory Board includes (in alphabetical order): the Louisiana Association of Educators, the Louisiana Association of Public Charter Schools, the Louisiana Federation of Teachers, the Louisiana Recovery School District, New Orleans Parents' Guide, New Schools for New Orleans, the Orleans Parish School Board, the Orleans Public Education Network, and the Urban League of Greater New Orleans. For more information, please visit the organization's website.

EducationResearchAllianceNOLA.org

Contact Information

1555 Poydras Street
7th Floor, Room # 701
New Orleans, LA 70112
(504) 274-3617
ERANewOrleans@gmail.com

An Initiative of



About the Authors

Lindsay Bell Weixler

Lindsay Bell Weixler is Associate Director and Senior Research Fellow at Tulane's Education Research Alliance for New Orleans. She holds a Ph.D. in developmental psychology and a master's degree in statistics from the University of Michigan.

Jane Arnold Lincove

Jane Arnold Lincove is an Associate Professor of Public Policy at the University of Maryland - Baltimore County and a Non-Resident Research Fellow at Tulane's Education Research Alliance for New Orleans.

Alica Gerry

Alica Gerry is a Scientific Research Analyst at the Education Research Alliance for New Orleans at Tulane University. She holds a master's degree in public policy from the Humphrey School of Public Affairs at the University of Minnesota.