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DOES SCHOOL REFORM = SPENDING REFORM? THE EFFECT OF THE NEW ORLEANS SCHOOL REFORMS ON THE USE AND LEVEL OF SCHOOL EXPENDITURES



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Overview

Over the past quarter century, few ideas in education reform have had more consistent support than giving schools more autonomy. One way to do that is through charter schools. In particular, these public-private partnership schools, freed from district rules and union contracts, have the flexibility to spend their funding as they think best.

This study estimates the effects of the post-Katrina school reforms on the operating expenditures of New Orleans' publicly funded schools. We compare all the city's publicly funded schools to a group of Louisiana school districts that had similar spending patterns before the New Orleans reforms shifted the city to a charter-driven system. We also show changes for both groups before and after the post-Katrina school reforms, focusing especially on the most recent year of data available (2014). We draw the following conclusions:

- New Orleans' publicly funded schools spent 13% (\$1,358 per student) more per pupil on operating expenditures than the comparison group after the reforms, even though the comparison group had nearly identical spending before the reforms.
- Spending on administration in New Orleans' publicly funded schools increased by 66% (\$699 per student) relative to the comparison group, far more than the overall spending increase. Of this increase, 52% (\$363 per student) is due to a rise in total administrative salaries. Roughly one-third of the increase in administrative salaries is due to hiring more administrators, and the remainder is due to higher average salaries per administrator.
- Instructional expenditures in New Orleans' publicly funded schools actually declined by 10% (\$706 per student) relative to the comparison group. This decline is driven by a drop in spending for instructional staff benefits (\$353 per student) and in instructional staff's salaries (\$233 per student). Almost all of the decrease in total instructional salaries is due to lower average salaries per instructor, though new teachers still earn more today than teachers pre-Katrina who had the same years of experience.

Sample and Data Sources

Sample: New Orleans charter and traditional public schools, plus 17 similar school districts in Louisiana from 2000 to 2014

Data: District-level expenditures, including operational and instructional expenses

Source: Louisiana Department of Education

- Transportation spending and other expenditures, which typically include contracts to outside firms, each increased by 33%. However, student support expenditures and maintenance were largely unchanged.

The fact that instructional expenditures have decreased despite a large increase in operating expenditure is striking. The increase in administrative spending also suggests either that the lack of economies of scale has posed a real challenge in this decentralized system or that the educational models of charter schools involve higher management costs and perhaps a more top-heavy approach.

There is no one right way to use educational resources, and it is worth noting that these changes in spending levels and patterns came alongside a large improvement in education outcomes for students. Still, these results are somewhat surprising given the common concern that traditional school districts spend too much on large bureaucracies. We find that charter schools spend even more in that area.

Whatever the reasons, it is clear that the post-Katrina reforms led to more spending in total and different spending patterns in New Orleans' publicly funded schools.

BACKGROUND

Charter schools have become a growing percentage of publicly funded schools in the U.S. According to their advocates, the goals of charter schools include providing schools with more autonomy and holding schools accountable for performance, as well as facilitating school choice for families. Freed from district rules and union contracts, charter management organizations (CMOs) and school leaders can decide how to use resources in ways consistent with their beliefs about best practices, parental demands, and the requirements of performance-based contracts.

Critics point out, however, that district rules and union contracts serve useful purposes, freeing up school leaders to focus on instruction, preventing problems, and creating good working conditions and compensation for teachers. There are also concerns about transparency in how charter schools use funding, especially in the case of for-profit charters that might be more likely to use funds for private gain over student benefit. While New Orleans does not have for-profit charters, some of the same issues may arise with non-profits, which can use increases in revenue to pay higher salaries to their leaders.

One challenge, less widely recognized, is that CMOs tend to be smaller than school districts, representing a loss of economies of

scale. In larger traditional districts, schools can share a single system for accounting, busing, and food service. As an additional example, districts can have a single lawyer on retainer rather than having each separate CMO hire its own. Individual charter schools also tend to have fewer students than traditional public schools, creating the same economies of scale problem with extracurricular activities and other specialized services.

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At first glance, it is hard to predict how charter schools might spend money differently, and there are only few studies analyzing charter school spending patterns. Research consistently shows that charter schools tend to hire younger and less experienced teachers. Two other studies have considered spending patterns, but this appears to be the first to look at the effect of switching from traditional public schools to charter schools, which helps isolate the effect of the charter approach.

We try to get beyond the speculation by studying the post-Katrina school reforms. New Orleans' publicly funded schools are now almost all state-authorized charter schools. Because of the increased autonomy schools now have with regard to personnel decisions, curriculum, and spending, New Orleans offers a unique opportunity to study how a charter-driven city might change patterns in school spending.

We designed our study to analyze changes in citywide operating expenditure from 2000 to 2014. Specifically, we address two main questions:

1. Did overall district spending levels differ in New Orleans before and after the reforms?
2. How have funds been used differently since the reforms—on administration, instruction, transportation, and other areas?

We answer these questions by comparing New Orleans with a group of districts that had very similar spending patterns prior to the reforms so that we can be confident that the reforms caused any observed changes.

POLICY CONTEXT

The key aspect of the post-Katrina school reforms, for purposes here, is that charter schools are granted greater autonomy over their spending relative to traditional public schools. Charter schools are still required to follow state accounting rules and to have annual audits, but they are generally not subject to union contracts or district policies.

While we focus our discussion on the differences between charter and

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traditional public schools, it is important to note that the control of the vast majority of schools also shifted from the Orleans Parish School Board (OPSB) to the state and its Recovery School District (RSD), which introduced some of its own rules. In particular, the RSD requires all of its New Orleans schools to provide transportation. The OPSB and RSD also both essentially eliminated attendance zones so that families could choose schools anywhere in the city, which increased the average distance from home to school attended by about two miles per student. This, combined with the decentralized nature of spending decisions and limited leverage of economies of scale, almost guarantees that the reforms increased transportation spending.

The fact that families have more choice also means that they might place pressure on schools to change how schools work in ways that alter their spending patterns. However, it is unclear in this case exactly how this would change school spending patterns. Even the families most involved in their children's schools are generally unaware of school finances; if anything, the spending pressures from school choice are

likely to be indirect as families demand particular kinds and quality of services.

Other evidence suggests that the intense test-based accountability created by the state plays a strong role, alongside school choice, in affecting school decisions. Given the accountability focus on academic outcomes, we might also expect an increase in instructional expenditures.

The state is also in the process of returning control of the charter schools under its authority to the OPSB, which may eventually create different pressures on the city's schools. However, the present analysis completely precedes this policy change and focuses on the period when the state RSD controlled the vast majority of schools.

HOW DID WE CARRY OUT THE ANALYSIS?

We report district-level expenditures from 2000 to 2014 for New Orleans publicly funded schools, provided by the Louisiana Department of Education (LDOE). We checked the validity of the data with charter school and authorizer audits in the years they are available. The various data sources yield very similar patterns, and we therefore report only the LDOE data here.

We omit the 2005-06 school year because this was the year of Hurricane Katrina, and these figures are not informative. The related technical report for this study also uses data back to 1990, though we do not report the earlier years for simplicity. All figures are adjusted for inflation and reported in 2014 dollars.

Our analyses focus on the per-pupil operating expenditure of all New Orleans publicly funded schools, including charter and traditional public schools. We also include expenditures by the CMOs, as well as OPSB and the RSD, the city's two school districts, to ensure that we cover the full scope of costs in the city.

Our main spending categories, such as administration and instruction, are defined by the Louisiana Accounting & Uniform Governmental Handbook. Instructional expenditures include only spending for activities dealing directly with interactions between students and staff. The Handbook also splits administrative spending into several smaller categories. School administration refers to spending on the administrative responsibilities at the school level, such as the principal's salary. Central administration includes planning, research, development, evaluation, information, staff, and information technology activities, which usually arise at the CMO or

district. General administration includes other expenses involved in carrying out CMO and district policies that are not included in the other categories. Note that all of the funding categories we report throughout the study are mutually exclusive. Each dollar of spending is only counted once.

Salaries and benefits represent by far the largest share of operating expenditures. Some personnel have their positions split between management and instruction. In these cases, we apportion the salaries and benefits based on the share of their total salaries in each category.

Understanding the effects of the reforms on spending requires more than just comparing spending patterns before and after the reforms. There might be general trends in spending across schools that have nothing to do with the reforms, such as economic recessions and changes in funding formulas. To address this issue, LDOE also provided data on the rest of the state, which we used to create a comparison group. Specifically, we used a technique called synthetic control analysis to create a weighted average of other districts that almost exactly mirrors the pre-reform patterns in New Orleans school spending. This gives us a very good prediction of how New Orleans schools would have spent their funds in the absence of the reforms. The results are also very similar when we used alternative comparison groups, such as limiting the group to districts directly affected by Hurricane Katrina. The differences in spending allocations between New Orleans and the comparison can then be interpreted as an effect of the reforms.

We take two steps to ensure that we are identifying the effects of the reforms on long-run school spending, as opposed to temporary changes related to rebuilding the school system. First, we focus on operating expenditures and completely omit the large capital expenditure required to rebuild schools after the storm. We also focus on the most recent year (2014), as the vast majority of the rebuilding efforts had been completed at that point (here and throughout this brief, when we refer to a single year, it is the spring of the academic year; in this case, 2014 references the 2013-14 academic year).

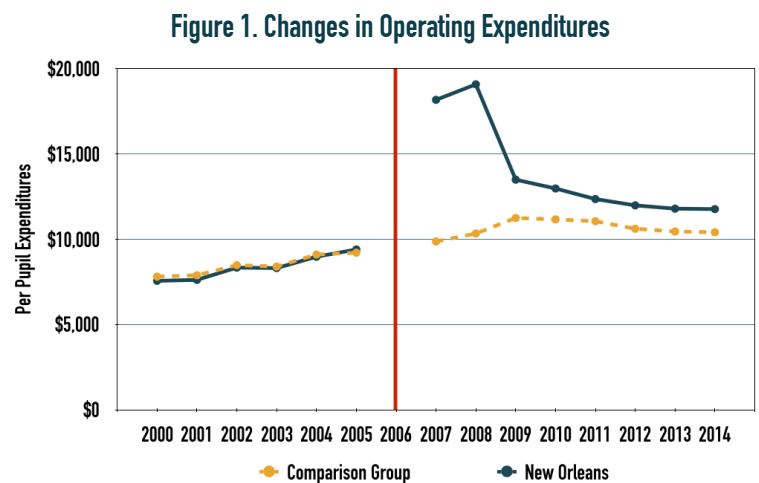
To be clear, the changes in total operating expenditures per pupil are probably not driven by the reforms per se. Since the vast majority of funding comes from the government, it could be that the changes in spending levels were driven, for example, by voters' desire to help the city rebuild, or the government may have been more willing to support New Orleans' schools with the reforms in place and with greater confidence that the money would be used well. Whatever the reason, we view the changes in spending patterns (administration versus instruction, etc.) as effects of the combination of the reforms

and the change in overall expenditure.

Finally, note that we do not report the usual confidence intervals in this analysis, but all reported changes are statistically significant by the usual scientific standards.

DID THE TOTAL OPERATING SPENDING LEVELS CHANGE AFTER THE REFORMS?

We find that New Orleans' operating expenditures after the reforms increased more than the comparison group's spending. In Figure 1, before the reforms, the spending trends for New Orleans and the comparison group were nearly identical and gradually rising.



The vertical line in the middle of Figure 1, and in all later figures, indicates the year of the hurricane. After that, the reforms started, and we see sharp and persistent changes in spending levels. By 2014, New Orleans' operating expenditures were 13% (\$1,358 per pupil) higher than the comparison group.

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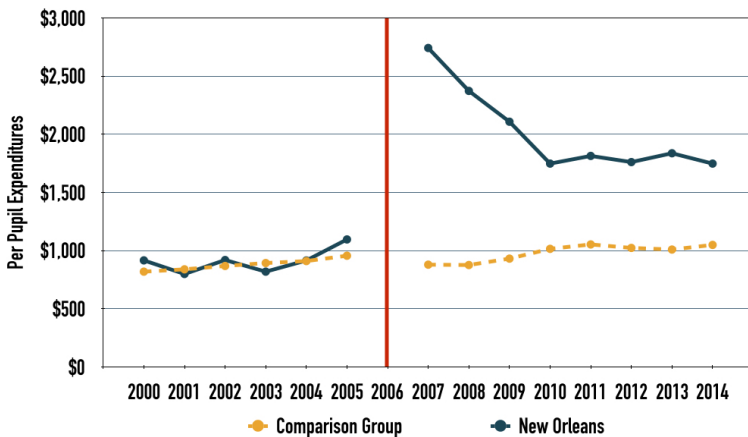
We report only expenditures here, though the revenue trends closely match Figure 1. This just reflects the fact that schools spend the vast majority of the funds they receive. The technical report associated with this brief provides additional detail on revenue sources.

The key point here is that if schools increased all their spending categories equally, then we would expect all the individual categories to increase by the same 13% reflected in Figure 1. As we show below, this is far from the case. Some categories increased far more than this, and others actually decreased.

HOW DID SPENDING ON ADMINISTRATION CHANGE BECAUSE OF THE REFORMS?

One of the most striking conclusions of our analysis is the steep increase in administrative spending. Figure 2 shows this clearly. Total administrative expenditures, which again were nearly identical prior to the reforms, were 66% (\$699 per pupil) higher than the comparison group in 2014.

Figure 2. Reform Effects on Overall Administrative Spending



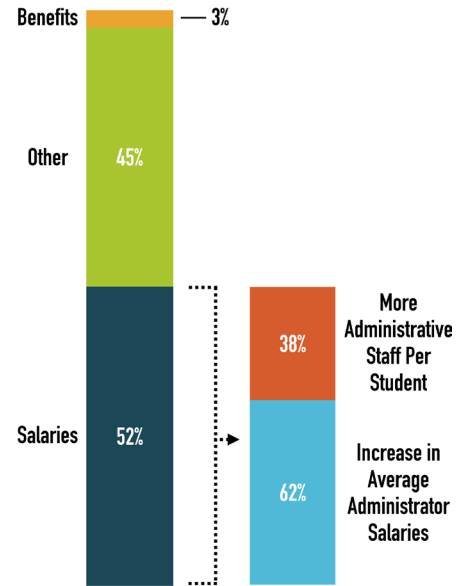
This increase is five times larger than we would have expected if the increase in total expenditure had been spread evenly across spending categories. School administration is the largest contributor to the increase in administrative spending (\$503 per student) followed by central administration and general administration, which only grew marginally. Note also that the scale of y-axis differs between Figures 1 and 2 and others below so that the changes in spending in smaller categories are easier to see.

To better understand the sources of these trends, we break the categories down further into administrative salaries, fringe benefits (health care and pensions), and other expenses (Figure 3). Roughly half of the increase is due to salaries, and the other half is due to these other categories.

We break down the salary figure even further. The right side of Figure 3 shows that 62% of the increase in salaries is caused by an increase in the average administrative salary, while the remaining 38% is caused by a

rise in the number of administrators per pupil. In other words, there are more administrators, and they typically earn higher salaries than they would have without the reforms.

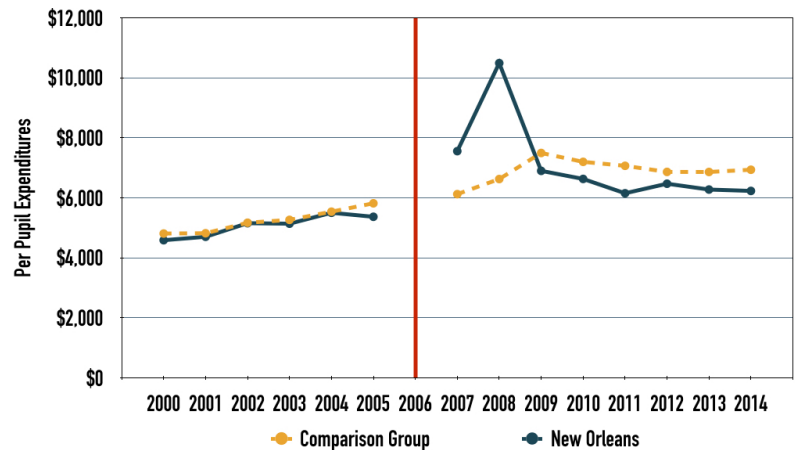
Figure 3. Reform Effects on Administrative Spending, by Category



HOW DID SPENDING ON INSTRUCTION CHANGE BECAUSE OF THE REFORMS?

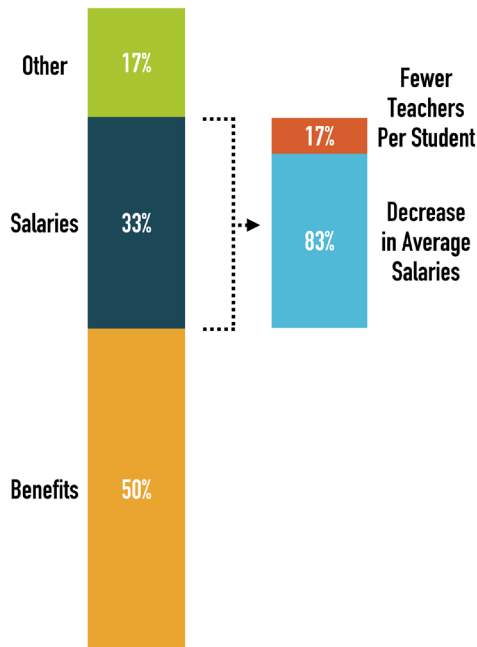
Despite the large increase in total expenditures per pupil, instructional spending actually declined because of the reforms. As of 2014, New Orleans publicly funded schools spent 10% less (\$706 per student) on instructional expenditures than the comparison group. The decline in instructional spending is even larger than the increase in administrative spending.

Figure 4. Reform Effects on Overall Instructional Spending



To better understand what happened, we again break the results down into smaller categories. In this case, we see large declines in salaries and even larger declines in fringe benefits (Figure 5). The decline in benefits for instructional staff explains 50% of the decrease in instructional spending. The vast majority of the decrease in instructional staff salary spending (83%) is explained by a reduction in the salaries themselves, while a small portion (17%) is due to a decrease in the number of teachers per pupil.

Figure 5. Reform Effects on Instructional Spending, by Category



The decline in salaries only makes up one-third of the reduction in instructional spending and is mainly driven by the 12-year decline in the average experience level in the district. In all professions, including teaching, people are generally paid more when they have more experience. Post-reform New Orleans teachers actually earn more than those from the pre-Katrina period who had the same years of experience.

We do not break down benefits into smaller categories, but these are naturally similar to what we report for salaries. That is, the decline in benefits, too, is almost entirely due to the decline in benefits per instructor. This is mostly because, in the pre-reform period, charter schools were required to pay into the Teachers Retirement System of Louisiana (TRSL).

The size of the decline in benefits—50% of the total instructional decline—is noteworthy, however. Before the reforms, all public

schools in New Orleans participated in TRSL. With the charter-based school reforms, schools were not required to participate in TRSL and could alternatively offer 403(b) programs which require only small contributions by the schools. In 2014, only 42% of schools were enrolled in the state pension plan. The TRSL rates—that is, the amount the state charged schools for TRSL participation—also doubled after the reforms, making it even more expensive for participating schools. Since a large share of these rising rates went to pay legacy costs of already-retired teachers, current teachers would not receive all the schools’ pension contributions back even in the long run.

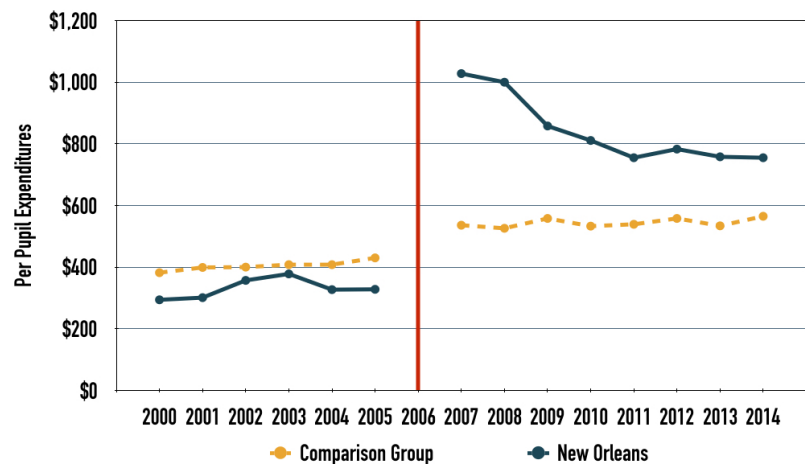
HOW DID OTHER CATEGORIES OF SPENDING CHANGE BECAUSE OF THE SCHOOL REFORMS?

The vast majority of school spending goes to pay the salaries and benefits of teachers, administrators, and other staff. However, a few additional categories are worth noting.

Recall that families were given almost complete choice over any publicly funded schools in the city and that RSD charter schools were required to provide transportation. Given these two policies and the reduced economies of scale, transportation costs were almost guaranteed to rise.

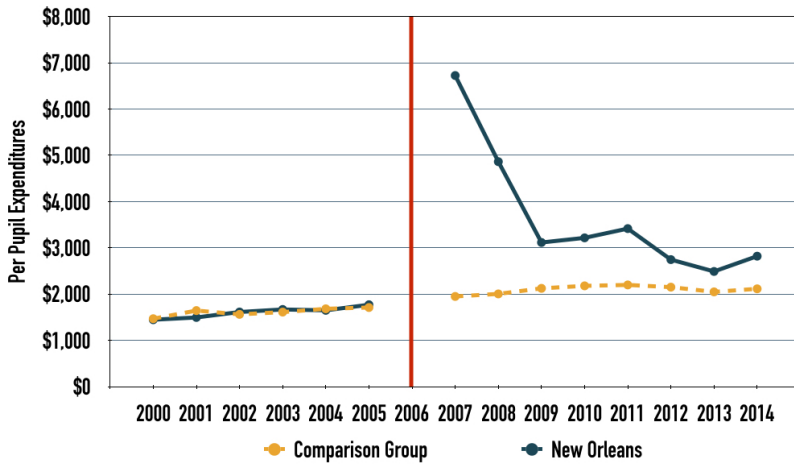
Figure 6 shows that this is exactly what happened. These results show an increase in roughly \$300 per pupil as of 2014. In this case, the comparison group was spending \$100 more before the reforms, so the \$300 figure reflects sum of the initial difference and the \$200 difference in 2014.

Figure 6. Reform Effects on Transportation Spending



It also turns out that charter schools are much more likely to contract out for services with outside organizations. These expenses, along with some smaller categories, are reflected in the other spending category shown in Figure 7. Spending in this category increased by 33% (\$704 per student).

Figure 7. Reform Effects on Contracted Services and Other Spending



DISCUSSION

The first important observation here is that the New Orleans school reforms did not only entail a shift to charter schools and school choice, but also in spending. Research increasingly shows that money is a contributing factor in any school improvement effort. While our calculations suggest that this increase in spending could not plausibly have explained all the reform effects on student academic outcomes, these funds almost certainly explain some of the effects. Money matters for charter schools and traditional public schools alike.

Regarding the pattern of spending, the main effects of the reforms have been the increase in administrative expenses and contracted services, offset by a decline in instructional expenditures. When we look more closely, we also see that salaries for administrators and teachers are moving in opposite directions.

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These changes might seem surprising given the criticism that traditional public schools spend too much on management, but the patterns are not difficult to explain. A loss in the economies of scale and a reduction in services by districts and authorizers lead us to expect higher spending on administration and contracted services by schools and CMOs. The declining participation in the state pension system and drop in average teacher experience also explain declining spending for instruction.

There are several reasons to be confident in these results: First, prior research on the subject, though limited, has also found that charter schools spend a larger share of funds on administration. Second, most of the changes are driven by salaries, which tend to be very accurately reported. Third, the results hold up regardless of which data sources and comparison groups we choose. These patterns almost certainly reflect real differences in the allocation of resources and real effects of the reforms.

If there is any uncertainty, it is over whether some categories of spending that were previously categorized as instructional are now being placed in the administrative category. However, this is strictly hypothetical, and we have no evidence to suggest this is the case. Some might also wonder whether charter schools are contracting out some forms of instruction, such as special education, which would shift funds from instruction to the other spending category. However, if that were driving the results, there would be a substantial reduction in the number of teachers. What we actually see is a reduction in average salaries and benefits per teacher.

One possible reaction to the higher salaries for administrators is that charter school educators are using the reforms to enrich themselves. However, it is worth noting that charter schools are more likely to hire educators with degrees from elite colleges and school leaders with business backgrounds, people who typically earn high salaries outside of education. The higher salaries may partly reflect the other professional opportunities available to the new educator workforce.

The hiring of additional managers might be related to the reliance on younger teachers who no doubt need more active leadership and professional development. The substantive issue is whether this alternative model—trading off more managers for lower teacher experience—is good for students. From what we know so far, the system is working to improve measureable student outcomes.

Even if the New Orleans reforms are judged positively, however, it is not clear whether this model is sustainable financially. There are signs that interest in New Orleans is abating among younger teachers

and growing concern about the constant churn of teachers who do not plan to stay or make teaching a career here. The state government is also in dire financial straits and may eventually have to either reduce spending or force charter schools to pay into the state pension system. Something will have to give.

There is no right way to spend money in schools, but money clearly matters and provides important information about how schools operate and what they value.

How Does This Research Relate to Other ERA-New Orleans Studies?

The research agenda of the Education Research Alliance for New Orleans is designed to understand the effects of the reforms on students and the ways in which those effects arise. Spending is one mechanism for school improvement.

Since our results suggest that charter schools spend a larger share on administration, we are beginning to examine the organizational structures of charter schools and CMOs to see how the allocation of specific management positions has changed (for example, whether schools have more broadly distributed leadership).

Given that the changes in instructional spending are driven by changes in the teacher workforce, readers may also be interested in our earlier descriptive analysis of teacher certification, experience levels, and teacher degrees in the report, *Significant Changes in the New Orleans Teacher Workforce* (Harris & Barrett).

In an upcoming paper, we will be examining more closely the factors that explain educator compensation. An additional study will examine the decrease in New Orleans public schools' participation in the state's teacher pension system, the Teachers' Retirement System of Louisiana (TRSL).

Since the ultimate goal of spending and other aspects of education is to improve student outcomes, our analyses of student outcomes are also relevant. In *What Effect Did the Post-Katrina School Reforms Have on Student Outcomes?*, Douglas N. Harris and Matthew Larsen find that the charter-based reforms have had large positive effects on student test scores.

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.

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