



VALUING THE EARLY YEARS IN STATE ACCOUNTABILITY SYSTEMS UNDER THE EVERY STUDENT SUCCEEDS ACT

ELLIOT REGENSTEIN
MAIA CONNORS
RIO ROMERO-JURADO

Extensive research on child development has shown that the years from birth through age eight matter enormously to a child's long-term educational outcomes, but until now state education accountability systems were pushed by federal law to ignore those years. That has changed with passage of the federal Every Student Succeeds Act (ESSA), which gives states new opportunity to hold districts and schools accountable for the quality of their work with students prior to 3rd grade. States can use that opportunity to improve the early elementary grades—and even pre-kindergarten education—by ensuring that those years are meaningfully weighted in their accountability systems and by using metrics of school quality that support best practices in those critical years.

This paper explains the importance of including the early years in state accountability systems; those years are of critical importance to achieving long-term educational success but have been largely ignored in previous state accountability efforts. It then explains two potential best practices for states seeking to use accountability systems to drive improvement in the early elementary years:

- > Focusing on the quality of instruction in the early elementary years, rating schools both on the quality of the instruction itself and on the quality of the systems to support quality instruction
- > Putting specific attention on the early elementary years by disaggregating measures of school quality by grade, which can help ensure that these years are given at least their proportional weight in measurements of overall school quality

Accountability systems are critical levers of state policy that have had significant impact on local decision-making. Helping students achieve college and career readiness will be a key focus of discussions about state accountability system design¹, but the preparations for college and career do not start in 3rd grade. States have the opportunity under the ESSA to encourage and support improved practice at the early elementary level—and earlier.

I. THE PROBLEM: NO ACCOUNTABILITY IN CRITICAL DEVELOPMENTAL YEARS

A. The Power of State Accountability Systems

State accountability systems are potentially significant influences on local action. Advocates for robust accountability systems have frequently identified the major goal of their advocacy as being improved outcomes for low-income and minority students,² although there is disagreement about how effective accountability systems have been at achieving that goal.³ Regardless, many agree that accountability systems have the power to drive local behavior.⁴

Unfortunately, in some instances the behaviors that accountability systems have driven were not the ones any of its architects likely intended.* For example, in the Texas accountability system that set the model for No Child Left Behind (NCLB), schools seeking to achieve higher status sometimes classified low-performing students as eligible for special education—which allowed the schools to avoid counting those students in their performance metrics but did not necessarily lead to improved educational outcomes for the students.⁵

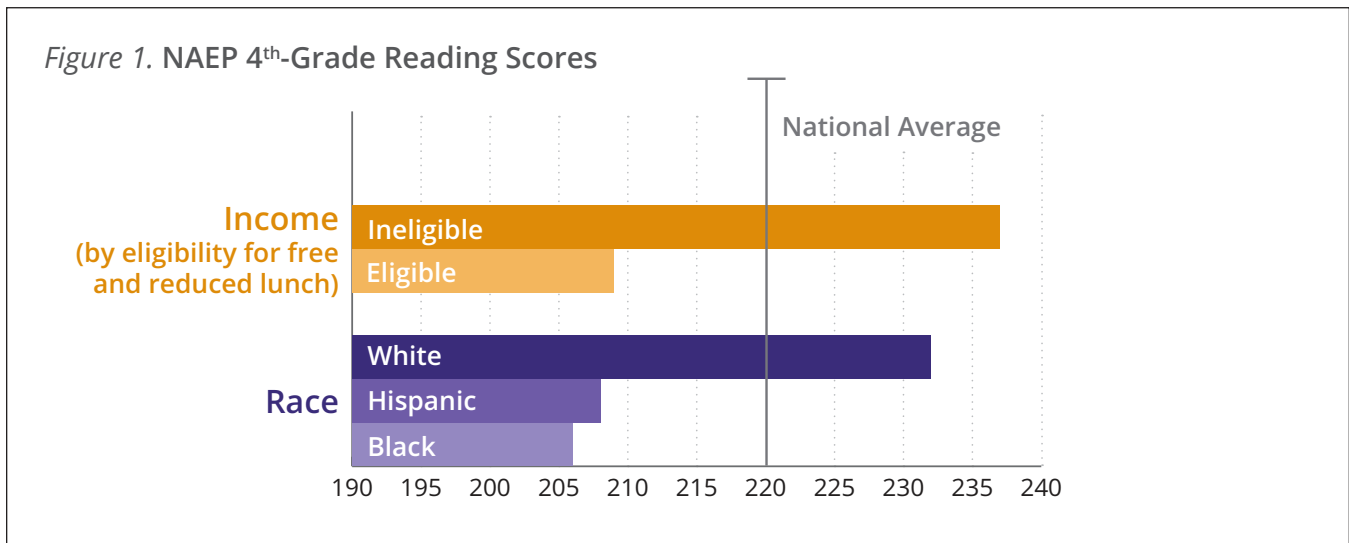
* Throughout this paper there is discussion of the incentives created by states for action by local educators. The paper's argument does not assume that educators will universally follow those incentives; there are numerous examples of local educators resisting state incentives, including incentives to "game the system" through educationally suspect practices. But as noted in the text (citing D. Deming et al. in *Education Next*), in some instances under No Child Left Behind well-intended federal law led to well-intended state policies that pushed well-intended local educators into educational malpractice. One major goal of this paper is to help states reduce the instance of such occurrences by setting up incentives that lead local educators in the right direction, recognizing that not all local educators will follow policy incentives whether or not those incentives are well aligned with sound educational practice.



Under the ESSA, states have the opportunity to create new incentive structures that encourage local education leaders to take actions that are likely to lead to improved educational outcomes. There are many ways states might do this, but one specific opportunity is to take new approaches to the pre-3rd-grade years—a time of great long-term importance to child development and learning.

B. The Achievement Gap Opens Early

Research shows that a significant percentage of brain development takes place in the first five years and that the interactions children have with adults in those years meaningfully impact that brain development.⁶ Indeed, the first five years of life provide an incredibly important opportunity to impact long-term child outcomes, with the quality and quantity of responsive interaction with adults a critical factor in helping children get on the right trajectory.⁷ Increasingly, educators understand that in many low-performing school districts, the achievement gap opens before kindergarten and then largely holds steady throughout the K–12 years.⁸ Data from the National Assessment of Educational Progress (NAEP) shows that by 4th grade, achievement gaps by race and income are quite substantial (Figure 1).⁹



Attempting to solve the problem starting in 3rd grade simply will not work, but high-quality early learning—particularly when well aligned to strong early elementary programs—can make a significant difference.¹⁰ In the NCLB era, states have recognized the importance of early learning and taken steps to expand access to it; for example, in 2001–2002, state-funded pre-k programs enrolled 14% of 4-year-olds, but by 2014, they enrolled 29% of 4-year-olds.¹¹

C. Under NCLB, Accountability Systems Discouraged Addressing the Achievement Gap Early

Given the importance of the early elementary years—and their relative absence from previous iterations of state accountability systems—the opportunity to improve the incentives for quality education prior to 3rd grade may be one of the greatest opportunities presented by the ESSA. Indeed, while states have recognized the importance of the early years, their federally mandated accountability policies have impeded local progress. Under NCLB, state accountability systems measured the quality of elementary schools largely through test scores in 3rd grade and up. This created ongoing pressures for local education leaders to focus resources on the tested years¹²:

- > The average tenure of superintendents is less than four years, and often shorter in low-performing districts. This means that children in preschool during the first year of a superintendent's tenure likely will not take any standardized tests until a new superintendent has come in. Therefore, the longer it is until children reach 3rd grade, the less incentive a superintendent has to focus on them—even though brain science tells us that the earlier we support children, the bigger the opportunity for impact.

In addition, expanding high-quality preschool can take time. A successful school-district-led initiative to improve early learning can take months of planning¹³, which leads to better long-term outcomes but only decreases the chances that its impact will be felt during the current superintendent's administration. Moreover, the maximum impact of these initiatives is rarely felt in the first year of implementation, as it can take time to fine-tune the systems needed for preschool to be successful.

- > Many low-income communities have transient populations in which children are relocating frequently. Research on school change indicates that just over half of kindergartners remain in the same school by the end of 3rd grade.¹⁴ Because in high-mobility districts many younger students may end up being tested in other districts, those districts have an incentive to focus their efforts on the children whose test scores will impact their district's accountability results.

Importantly, among the students who transfer districts between kindergarten and the tested years, many stay in the same state. This means that districts may frequently look at their kindergarten classes and assume that those children will never be tested in their district—but because many of those children will remain in the state, the state will likely be responsible for their long-term outcomes even if the district they live in as kindergartners is not. Because states have a stronger likelihood than districts of having an institutional interest in long-term outcomes, they should use their accountability system to make sure that districts' short-term interests align with the state's—and support the child's long-term interests.

These factors help explain why accountability systems have encouraged the assignment of weaker teachers to untested grades, where they may be seen as having less impact on a school's test scores; some schools have in fact made such decisions.¹⁵ As Ellen Goldring and colleagues stated in a 2014 report:

Many principals respond to the pressures of accountability systems that apply disproportionately to tested grades and subjects by moving less effective teachers into untested classrooms. These moves appear especially problematic in elementary schools, where reassignment of ineffective teachers away from tested classrooms is most easily accomplished by moving them to the early grades. Although these moves may benefit the school's test score performance in the short term, research on the importance of early learning for children's later schooling outcomes suggests that this strategy may have a negative impact on students' learning as they advance through school.¹⁶

In sum, the entire accountability incentive structure has pushed local educators to focus on short-term fixes rather than on the long-term improvements that can be seeded in the years before 3rd grade.

Despite these incentives, some superintendents and principals have built impressive preschool-through-3rd-grade systems, but in doing so they have been swimming upstream against NCLB's current.¹⁷ Many educators in the K-12 system—from superintendents to principals to teachers and every other kind of professional—undertake substantial efforts to help children regardless of what state incentive structures would have them do. But with states engaging in major overhauls of their accountability systems, now is the time to ensure that accountability incentives support, rather than impede, best practices in the years prior to 3rd grade.

II. CREATING MEANINGFUL EDUCATION ACCOUNTABILITY FOR THE YEARS BEFORE 3RD GRADE

The ESSA opens up new possibilities for elementary school accountability that were not previously included in federal law. Under the ESSA, states will continue to be required to maintain school accountability systems, but the federal parameters for those systems have changed substantially. Instead of the dominating focus on test proficiency in 3rd grade and up under NCLB, the federal statute now requires states to incorporate multiple types of test results and a new “indicator of school quality or student success” (referred to below as the School Quality Indicator). State education leaders have indicated they intend to maintain high standards of accountability,¹⁸ although some commentators believe the law will lead to lowered expectations of quality.¹⁹

In addition to the School Quality Indicator, three other indicators are required in elementary school accountability under the ESSA. These other three focus on tests in 3rd grade or later:

- > Proficiency on annual assessments
- > A measure of student growth on assessments, or an alternate academic indicator
- > Progress in achieving English language proficiency by English language learners, as measured by assessments²⁰

These three indicators will collectively be referred to below as the Assessment Indicators, and collectively they are required to be given “much greater weight” than the School Quality Indicator in the overall system.²¹ (The exact meaning of “much greater weight” was considered ambiguous prior to the law’s passage, and as of the publication date of this paper has not been resolved.²²)

The School Quality Indicator language pushes states to develop meaningful indicators of performance that are not based on test scores and gives states relatively broad parameters:

- (I) For all public schools in the State, not less than one indicator of school quality or student success that—
 - (aa) allows for meaningful differentiation in school performance;
 - (bb) is valid, reliable, comparable, and statewide (with the same indicator or indicators used for each grade span, as such term is determined by the State); and
 - (cc) may include one or more of the measures described in subclause (II).
- (II) For purposes of sub clause (I), the State may include measures of—
 - (III) student engagement;
 - (IV) educator engagement;
 - (V) student access to and completion of advanced coursework;
 - (VI) postsecondary readiness;
 - (VII) school climate and safety; and
 - (VIII) any other indicator the State chooses that meets the requirements of this clause.²³

Within these parameters, there are two primary strategies states should use to make sure that educators have incentive to focus on the years before 3rd grade.

First, states should use the School Quality Indicator to focus on instructional quality and the key systems behind it. For too long, accountability systems have focused on what is easily measured, not what matters most. What matters most to children in the early elementary grades is the quality of their interactions with teachers, and accountability systems should include measures of the quality of interaction in the School Quality Indicator.²⁴ In addition, the School Quality Indicator should include other measures of systemic quality and organizational conditions that have been linked to practices that are most important for students’ learning.

Second, states should make the early years count by weighting them separately in the School Quality Indicator. One of the successes of NCLB that was carried into the ESSA is a focus on disaggregating data when aggregated data might mask disparities in performance among different groups of students. Analogously, states should require the disaggregation of data within the School Quality Indicator to highlight the quality of education that schools are delivering at each grade level. Doing so will allow for the implementation of an accountability system that places sufficient weight on the quality of education in the early elementary years to make it meaningful to the school’s overall rating—and incentivize high-quality instruction for the youngest students.

A. Focusing on Instructional Quality in the School Quality Indicator

In designing the School Quality Indicator, states must be thoughtful about creating the right incentives for improvement in school quality and child learning. To maximize the impact of the School Quality Indicator, states should use measures that focus directly on the quality of professional practice. Improved professional practice leads to improved student outcomes, and so using measures focused on practice creates the right incentives for educators and gives them helpful feedback on how to improve.²⁵ One concern about NCLB was that it gave educators a “strong incentive to game the system.”²⁶ Ideally, the School Quality Indicator in the ESSA will help remove those perverse incentives and replace them with incentives to improve practice.

Accountability for professional practice is increasingly a part of early learning accountability, has long been used for voluntary accreditation in K–12, and is starting to be used in K–12 accountability systems.²⁷ Politically, it is a practice that has been described favorably by education reformers and traditional labor and school-management groups; state superintendents also included the idea in their next-generation accountability principles.²⁸ Importantly, measuring the quality of professional practice is something that can be done across all grades.

To implement practice-based accountability in a manner that leads to improved education, states developing their School Quality Indicators should focus on two key questions: (1) What is the quality of instructional practice in classrooms?, and (2) What is the quality of the systems behind those classrooms that are meant to ensure consistently high-quality interactions between teachers and students?

1. *The Quality of Classroom Instruction*

A significant body of research shows that the quality of teaching is the most critical influence schools have on long-term child outcomes.²⁹ In addition to being broadly true about schooling as a whole, it has been shown to be true for specific age ranges, including the early elementary grades³⁰ and early learning.³¹ In short, a School Quality Indicator that does not measure the quality of teaching is not measuring what matters most.

Measuring the quality of teaching is not a new practice. Indeed, scientifically validated and reliable observational tools have long been used to measure the quality of teaching in classrooms across the United States. In preschool, scores from these observations are used in a variety of ways, including ensuring that Head Start programs meet federal quality standards,³² determining state Quality Rating and Improvement System scores for early learning programs,³³ and informing professional development and quality improvement efforts.³⁴ Tools such as the Classroom Assessment Scoring System (CLASS Pre-K)³⁵ have been used to monitor, publicly rate, and improve the quality of preschool classrooms across the country for many years.

Although use of observational measures of teaching quality in elementary grades for accountability purposes has typically received less emphasis under NCLB, similarly valid and reliable observational tools—such as the CLASS K–3³⁶ and Danielson Framework³⁷—can be used effectively to rate and improve the quality of teaching in elementary school classrooms nationwide.³⁸ Importantly, administering these observations such that scores can be used in a high-stakes manner, such as in the School Quality Indicator, requires extensive observer training and ongoing reliability calibration among observers. When implemented correctly, observational measures of teaching quality and student surveys in later elementary grades are significant predictors of how much students learn.³⁹

Including instructional quality in the School Quality Indicator could instigate a potentially valuable statewide conversation about exactly what quality instruction entails.⁴⁰ Some states have already begun these conversations in designing teacher evaluation systems. Importantly, teaching practice will not look identical across the years; indeed, early childhood experts and advocates have expressed concern that teaching practices prior to 3rd grade do not reflect developmental best practices for children in those years.⁴¹ Part of the problem for teachers of young children is that they may lack instructional leadership and support: A significant majority of elementary school principals have indicated that they are not confident in their level of understanding of child development in the early years.⁴² Developing a greater statewide understanding of what quality teaching looks like in the early years would have significant value to educators, and a state-level commitment to including classroom instructional quality in the ESSA School Quality Indicator could help facilitate the process of building knowledge and capacity in this area, as well as spark the development of innovative new observational tools that more precisely measure the elements of teaching that matter most.

BEST PRACTICE TEACHING IN THE EARLY YEARS

Best practice teaching in the early years requires trusting, supportive relationships in a language- and content-rich environment.⁴³ Effective teachers are knowledgeable about best practices in child development and engage skillfully with children and parents.⁴⁴ Activities are tailored to a child's individual needs,⁴⁵ with adults conducting conversations with children that respond thoughtfully to a child's questions.⁴⁶ Teachers also need to support dual language learners, and research shows that the most effective way to do that is to help them simultaneously develop skills in English and their home language.⁴⁷

2. *The Quality of Schoolwide Systems*

For children to consistently experience quality instruction throughout their educational progression requires schools that are set up to systemically deliver that quality instruction schoolwide. A previous Ounce Policy Conversation, *A Framework for Rethinking State Education Accountability and Support From Birth Through High School*, lays out an approach to practice-based accountability grounded in the five “essential elements” identified by the Consortium on Chicago School Research as critical to school success:

1. A coherent instructional guidance system
2. Professional capacity
3. Strong parent-community-school ties
4. A student-centered learning climate
5. Leadership to drive change⁴⁸

Research has shown that the absence of any of these conditions threatens the likelihood that a school will be able to consistently produce strong student outcomes. Thus, if a School Quality Indicator measures how schools are doing in these areas, that will give schools an incentive to show improvement in these areas, which research shows are the areas where improvement has the greatest impact on school and student success.⁴⁹ For example, strong leadership at a school is a critical driver of every other change a school needs to make,⁵⁰ and family and community engagement are also key elements of long-term school success.⁵¹ A robust School Quality Indicator that includes these factors will provide more valuable information that helps support meaningful ongoing improvement.

As is true for the quality of instruction, the quality of schoolwide systems can also be assessed using scientifically validated and reliable measurement tools.⁵² Measures of schoolwide systems quality most often include document review and/or teacher, parent, and (in later grades) student surveys. Although widespread focus on these organizational conditions is comparatively new, both New York City and Illinois have been monitoring the quality of these elements in all public schools for at least a decade.⁵³ Using rigorously tested and universally distributed teacher- and (in New York City) parent-based surveys on the five essential elements framework, both jurisdictions have successfully collected valuable information about the quality of schoolwide systems in their elementary schools. The state of the art in this area is still emerging, and the development of new measures of the quality of organizational conditions in preschool programs—such as the Five Essentials-Early Education Measurement System and Supportive Environmental Quality Underlying Adult Learning tool—will likely facilitate increased focus on the importance of these schoolwide systems in the preschool years as well.⁵⁴

GOING BEYOND THE STATUTORY MINIMUM

The ESSA statutory language governing the School Quality Indicator does list some measures that states may include in their School Quality Indicator. These include student and educator engagement, access to and completion of advanced coursework, postsecondary readiness, and school climate. The five essential elements encompass at least three of these (student engagement, educator engagement, and school climate), and the advanced coursework and postsecondary readiness indicators are not likely to apply to elementary schools in any case. The statute also clearly authorizes the state to add other indicators if it chooses, so states have broad latitude to design a School Quality Indicator that encompasses multiple research-based measures of school quality.

As noted in II.A.2 above, it is also important for states to align the School Quality Indicator with their accountability systems in early learning, commonly known as Quality Rating and Improvement Systems.⁵⁵ These systems have historically been grounded in the child-care system, which can look very different from the public schools; however, they are increasingly being applied to more education-focused programs like state pre-k.⁵⁶ These systems are also in a period of rapid evolution in many states, and a conversation about aligning Quality Rating and Improvement Systems with School Quality Indicators could prove to be valuable for both early learning and K-12.

3. Pulling It Together: The School Quality Indicator

Measuring the quality of instruction and the quality of schoolwide systems should be a best practice for states and for all K-12 schools, regardless of whether states are trying specifically to increase the emphasis on the early elementary years. This approach can be used in all grades; it is just as possible to measure the quality of kindergarten teaching as it is to measure the quality of an Advanced Placement calculus class. Unlike the Assessment Indicators, which will focus on 3rd grade and up, the School Quality Indicator allows states to directly measure quality in all grades.

To effectively implement a School Quality Indicator that combines instructional quality and schoolwide systemic quality effectively, states will have to do the following:

- > *Develop a Composite Indicator.* Developing a composite indicator requires some thought, as states will need to balance multiple measures to design a successful School Quality Indicator (as, indeed, they will have to do in the accountability system writ large). One important

aspect of that design (discussed further in II.B.1, below) is that the instructional quality subindicator can be disaggregated by grade, whereas the school systems sub-indicator — which measures the quality of schoolwide practices — probably cannot be.

States should consider including attendance in the composite indicator. Research shows that there are substantial short- and long-term negative consequences associated with excessive school absences in the early grades, including lower achievement, increased behavioral issues, lower social development, greater chances of grade retention, and greater risk of future absenteeism.⁵⁷ Simply put, if children are not in school, they cannot reap the benefits of quality instruction. As discussed further in II.B.1, attendance is also a sub-indicator that can be disaggregated by grade.

Some districts have already been using non-test data—including attendance data and survey results—to measure quality,⁵⁸ and states may look to build on those efforts in developing the School Quality Indicator. These efforts clearly have value, but concerns have been raised about how some of this data might be gamed.⁵⁹ Moreover, almost any indicator that states would want to use in an education accountability system could be influenced by income and other social factors; observational measures and attendance measures are certainly not immune.⁶⁰ In designing an effective inspection system, states must be thoughtful about the potential biases in any indicator and how to manage the potential impact most effectively.

The state data systems that have been used to manage accountability will need to be updated to reflect the demands of the School Quality Indicator.

- > *Develop an Inspection System.* States cannot expect to have a meaningful impact on school improvement if their only focus in developing the School Quality Indicator is on how to execute it as inexpensively as possible. Collecting meaningful information will likely require investment in an intentionally designed information-collection system.⁶¹ This practice is well established in early learning, and inspectorates used in several other countries have shown that thoughtful evaluations of school quality are likely to provide actionable information to state and local education leaders.⁶²
- > *Develop an Improvement System.* Measuring quality and identifying needs for improvement is essential but not sufficient. The real value of an accountability system should be its support for ongoing improvement.⁶³ The ESSA gives states new flexibility in how they provide supports to low-performing schools,⁶⁴ which creates an opportunity for states to design new systems for supporting school improvement and building educator capacity.

States can make the early years a more integral part of school improvement by requiring alignment with early learning as part of school-improvement planning, quantifying the kindergarten entry gap in low-performing schools, using data systems to build a better

understanding of child experiences prior to entering kindergarten, and supporting school efforts to partner with early learning providers.⁶⁵

B. Disaggregating Data About the Early Years

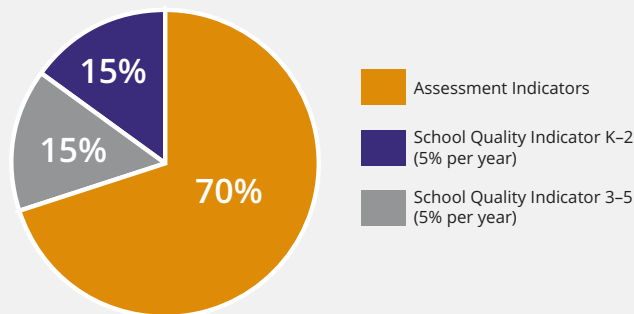
One of the most universally acknowledged successes of NCLB—and one of the key aspects of the law preserved in the ESSA—is its focus on disaggregating data. NCLB’s major contribution was requiring that test scores that had historically been reported for entire schools and districts be broken down into sub-groups. This disaggregated data revealed achievement gaps based on race or income that districts had previously been able to mask.

States should approach the School Quality Indicator in the same spirit and require that school scores be a composite of individual grade scores. Doing so will give schools specific incentive to focus on the quality of instruction in each grade level, not just those that are tested. Choosing to give specific weight to individual grades could ensure that real weight is placed on the years prior to 3rd grade in state accountability systems and provide specific feedback to school leaders on the quality of their offerings in those years. If states choose this approach, they will face two important choices: (1) how much weight to give to each grade and (2) whether to include preschool.

1. Weighing the K-2 Grades as Part of Elementary School Accountability

The simplest way to weigh the grades is to give them all equal weight. For example, if the state determined that the Assessment Indicators would count for 70% of an elementary school’s grade and the School Quality Indicator would count for 30%, it could choose to count each grade K-5 as 5% of the school’s grade (Figure 2).

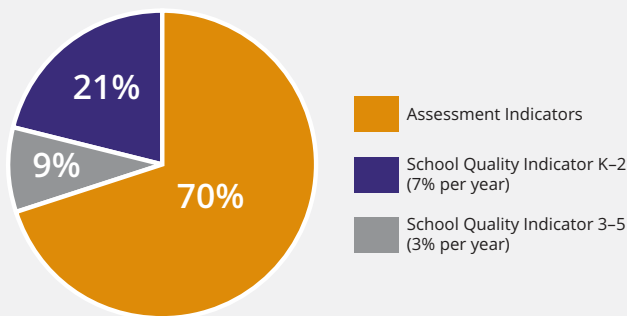
Figure 2. Equal Weighting of School Quality Indicators Across Grades



In this scenario, the K-2 years would count for 15% of a school’s overall accountability score.

Another option for states is to place additional weight on the K–2 years because there are no other indicators for those years, whereas there are for the later years. For example, using the same 70/30 split between the Assessment Indicators and the School Quality Indicators, a state could choose to weigh the School Quality Indicator for K–2 at 7% per year, and 3–5 at 3% per year (Figure 3).

Figure 3. Greater Weighting of School Quality Indicators in Earlier Grades



This approach might be particularly valuable in states that place a heavy emphasis on growth within the Assessment Indicator. A growth indicator would give schools an incentive to game the system by putting their best teachers in the tested grades and their weakest teachers in the early years—potentially the most effective strategy for showing growth. To counterbalance this incentive, states can place disproportionate emphasis on the instructional quality of the early elementary years, giving school leaders an incentive to put strong teachers in those grades.

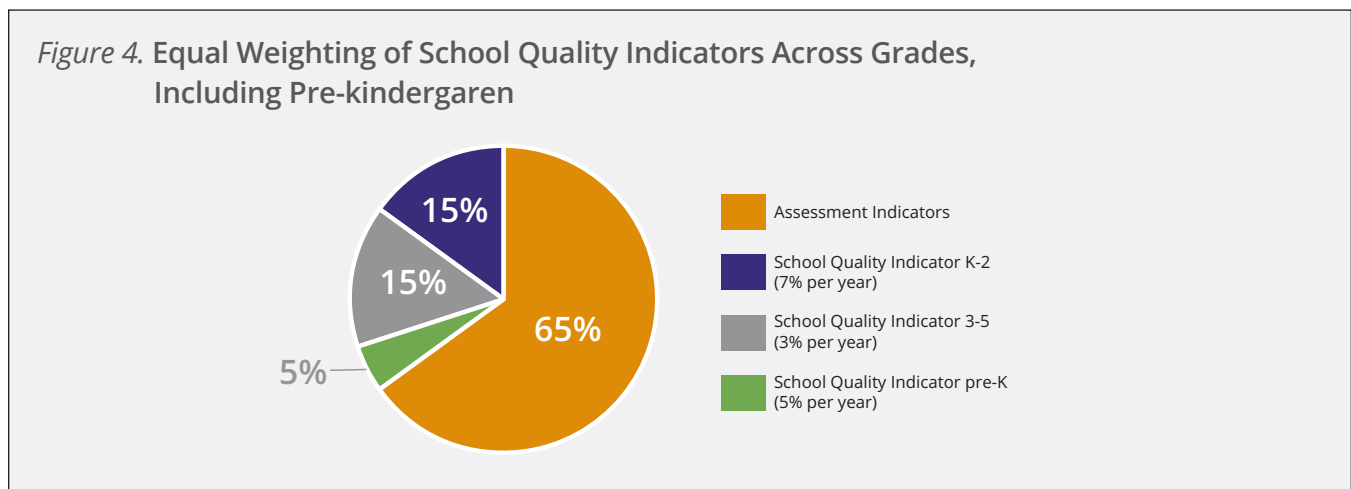
Given the requirement that the Assessment Indicators must account for the majority of a school's accountability score, the School Quality Indicator for K–2 will likely represent at most 15–25% of a school's score, regardless of whether K–2 is weighted equally to 3–5 or even greater. At this point, gauging the exact impact of that weighting is speculative. It seems likely that this percentage would be substantial enough to inspire at least some focus on these years, but application of that principle will likely vary. This is almost certainly an area where states will have to learn over time and monitor the impact to understand how much difference this weighting makes.

Finally, this disaggregation may be possible even if states design their School Quality Indicator in a manner radically different from that described in II.A above. There are many kinds of data about school climate, student engagement, and teacher engagement that can be broken down by grade. If states are using a composite measure that includes some factors easily disaggregated by grade and others that

are not—which is what II.A proposes—then the composite score can be designed to show differentiation among grades even when some variables are held constant throughout an entire school. It is also worth noting that the law appears to allow states to use different indicators for different school years as long as the indicators are consistent within a “grade span” as defined by a state, meaning that a composite indicator for elementary schools might be composed of different sub-indicators than the indicator for high schools.

2. Should Preschool Be Included?

Under the language of the ESSA, there is nothing to preclude states from including pre-kindergarten classes in a school’s School Quality Indicator. For example, a state could decide that if a school offers pre-kindergarten, those classes would be included as a grade for purposes of the school’s School Quality Indicator Rating. At a school with a preschool program for 4-year-olds, that might look something like Figure 4.



By including pre-k in their accountability systems, states would send a clear message that they value high-quality early learning and expect schools to deliver that quality. By making pre-k a core part of how schools are graded—rather than just an unaccountable add-on—states would reinforce that early learning is part of a larger progression, not just a separate, stand-alone project.

Some of the key considerations for states contemplating this option will be:

- > *Reflecting the State’s Funding Approach.* Including preschoolers in school accountability may make more sense for states that fund pre-k through their school-funding formula, where it is easier to consider pre-k part of school. But states that do not include pre-k in their funding formula may want to use this opportunity to provide greater incentive for schools to engage in early learning.

- > *Addressing Funding Outside the State Formula.* Schools frequently provide pre-k funded by one or more sources outside the state funding formula; these can include Head Start, Title I, and local discretionary dollars. Children served in these programs are not always counted as part of a school's listed enrollment, even if they attend classes in the school building. Reconciling how states and districts track these children is a worthwhile exercise regardless of whether the children's preschool program ends up part of the state's education accountability system—and conversations about the state's accountability system could help create momentum for that work.
- > *Addressing Non-providers.* Even in states with large pre-k programs, not all districts and schools provide pre-k. If some districts and schools have a pre-k year in their School Quality Indicator and some schools do not, the overall accountability formula will have to account for that difference. This should not be deeply problematic, however, as states will already have to account for the fact that schools may serve a wide variety of grade ranges (such as K-4, K-5, or K-8).
- > *Incentivizing Achievable Quality.* If a state's accountability system makes it too hard for schools to improve their overall scores by providing pre-k, that might be a disincentive to providing pre-k in the first place. But if the state's accountability system makes it too easy for schools to improve their overall scores by providing pre-k, that might lead schools to offer low-quality pre-k—which doesn't produce positive long-term impacts.⁶⁶ States will have to be careful about striking the right balance.
- > *Ensuring Alignment With Early Learning Accountability.* Most states have some existing system for rating the quality of early learning, and indeed many states have been aggressively expanding those systems in recent years. Aligning early learning and K-12 accountability systems is an outstanding opportunity to strengthen the connections between schools and early learning and to reinforce best practices that affect the entire birth-to-3rd-grade continuum.

In many states, the early learning accountability cuts across multiple programs—including state-funded pre-k, Head Start, and child care. If states include pre-k in their School Quality Indicator they must make sure it does not contradict the requirements of other preschool funding sources. Poor alignment can subject pre-k providers to confusing, conflicting, or unduly burdensome requirements that make the program hard to administer.

While school accountability is always overseen by the state education agency, quality control of early learning programs (including preschool) is frequently overseen by a different agency.⁶⁷ In states where that is the case, state education agencies would have to partner with those agencies to effectively ensure alignment between early learning accountability and early elementary accountability.

- > *Supporting Mixed Delivery.* As noted earlier, it will be important to consider the impact of including early learning in School Quality Indicators on community providers. States will have to consider how responsible districts and schools should be for the quality of service by community providers subcontracted to provide early learning. They will also have to review definitions of quality carefully to consider whether the accountability system is creating incentives or disincentives for schools to partner with community providers.

All the questions raised here are ones that states would have to wrestle with if they are considering including early learning in their School Quality Indicator, but the existence of these questions should not be a deterrent to having the conversation. Indeed, the development of new accountability systems under the ESSA will likely require state education agencies to engage multiple stakeholders to address numerous questions about every element of the new accountability system, including but not limited to the School Quality Indicator. The decision on whether to include pre-k in the School Quality Indicator will play out in that larger context. The positive aspect of this is that the agencies will already be engaging stakeholders in resolving previously unanswered policy questions; the negative aspect is that agencies will have limited bandwidth to answer a wide range of questions, and this issue might be easy to ignore (given that the simplest approach is to simply continue excluding preschool from state systems). But this is a potentially significant opportunity to give local schools greater incentive to launch high-quality early learning programs, and it would be valuable for states to at least explore this possibility to see what they might accomplish. That exploration should include not only school districts but also other early learning providers and community stakeholders, who can strategize together about how to have the most positive impact.

The bottom line is that understanding the likely impact on schools of including this indicator will take some discussion—and it is very likely that if states try this approach, their initial attempt to strike the right balance may miss in one direction or another. That should not be a reason not to try, as simply ignoring the issue may have a significant adverse impact on the accountability system. If states go this route, they need to be prepared to monitor and tweak their approach as they go forward to ensure that state-level policies are having the intended school-level impact.

Conclusion

The early years matter to a child's success in real life, but they did not matter to school accountability under NCLB. Faced with NCLB's ongoing pressure to increase test scores, district and school leaders by and large made the rational choice to focus their improvement efforts on the tested years. Now the ESSA gives states the opportunity to change the paradigm in which district and school leaders operate:

- > States can build an incentive structure for schools that measures the quality of their instruction and the systems that support their instruction. Measuring the things that really

matter gives schools the right incentives and also means that accountability systems are more likely to give schools actionable feedback.

- > States can put specific weight on the K–2 years to make sure there is a focus on quality practices in those years. One of the key successes of federal education law has been disaggregating data to help surface inconsistencies in quality; by disaggregating data about instructional quality in different grades, states can help make sure that the K–2 years, and potentially preschool, are given the attention they deserve.

The ESSA represents an opportunity to create meaningful accountability for educationally important years that have previously been ignored by state accountability systems. As states embark on designing next-generation accountability systems, they should ensure that their systems take advantage of new federal flexibility to include measures for the years prior to 3rd grade. If states take the right steps to make the early years matter, and design indicators that support ongoing improvement, they can encourage districts and schools to focus on those years in a manner that leads to long-term improvement for schools and long-term positive outcomes for children.

The authors are grateful to their many colleagues at the Ounce of Prevention Fund who reviewed and commented on drafts of this paper. The authors are also thankful for input from their external reviewers: Chad Aldeman, Jo Anderson, Ben Boer, Laura Bornfreund, Sara Boucek, Roger Eddy, Tamara Hiller, Mimi Howard, Sara Mead, Mike Petrilli, Tom Schultz, Sarah Trumble, and Albert Wat. The views expressed in this paper are those of the authors and do not necessarily represent those of the reviewers.

Join the Conversation at www.theOunce.org/policyconversations

Ounce Policy Conversations are published by the Ounce of Prevention Fund to stimulate and facilitate discussion on topics of interest in early learning policy. We welcome feedback on this paper, and may address that feedback in subsequent versions of this paper or in other papers. If you have comments or questions, please visit our webpage at www.theOunce.org/policyconversations or contact Elliot Regenstein at eregenstein@ounceofprevention.org.

ENDNOTES

- 1 Darling-Hammond, L., Wilhoit, G., and Pittenger, L. (2014). "Accountability for College and Career Readiness: Developing a New Paradigm." *Stanford Center for Opportunity Policy in Education*. <https://edpolicy.stanford.edu/sites/default/files/publications/accountability-college-and-career-readiness-developing-new-paradigm.pdf> ; Council of Chief State School Officers. (June 17, 2011). "Roadmap for Next Generation State Accountability Systems." Council of Chief State School Officers. http://www.ccsso.org/Documents/2011/Roadmap_for_Next-Generation_Accountability_2011.pdf ; Council of Chief State School Officers. (June 2011). "States' Continued Commitment to Next-Generation Accountability Systems." Council of Chief State School Officers. <http://www.ccsso.org/Documents/CCSSO%20Accountability%20Principles.pdf>; Gentz, S. (December 15, 2015). "Rethinking Accountability for Continuous Improvement of Next Generation Learning Models." International Association for K-12 Online Learning, Policy blog. <http://www.inacol.org/news/rethinking-accountability-for-continuous-improvement-of-next-generation-learning-models/>
- 2 Ushomirsky, N., Williams, D., and Hall, D. (2014). "Making Sure All Children Matter: Getting School Accountability Signals Right." The Education Trust. edtrust.org/wp-content/uploads/2013/10/All_Children_Matter.pdf; "Why Opting Out Is Shortsighted." *Washington Post*. https://www.washingtonpost.com/opinions/why-opting-out-is-shortsighted/2015/05/16/e4c2da7a-f4fa-11e4-bcc4-e8141e5eb0c9_story.html ; McKenzie, W., and Kress, S. (February 5, 2015). "The Big Idea of School Accountability." George W. Bush Institute. <http://www.bushcenter.org/essays/bigidea/>.
- 3 Tucker, M. (2015). "Annual Accountability Testing: Time for the Civil Rights Community to Reconsider." Education Week. Top Performers blog. http://blogs.edweek.org/edweek/top_performers/2015/05/annual_accountability_testing_time_for_the_civil_rights_community_to_reconsider.html.
- 4 Regenstein, E. and Romero-Jurado, R. (June 2014). "A Framework for Rethinking State Education Accountability and Support from Birth through High School," 36n3. Ounce of Prevention Fund, Policy Conversations No. 3, Version 1.0. <http://www.theounce.org/what-we-do/policy/policy-conversations>
- 5 Deming, D., Cohodes, S., Jennings, J. and Jencks, C. (Winter 2016). "When Does Accountability Work?" *Education Next*, Vol. 16, No. 1, 76. <http://educationnext.org/when-does-accountability-work-texas-system/>.
- 6 Center on the Developing Child. (2007). "A Science-Based Framework for Early Childhood Policy Center on the Developing Child Harvard University. http://developingchild.harvard.edu/wp-content/uploads/2016/02/Policy_Framework.pdf .; Phillips, D. A., and Shonkoff, J. P., eds. (2000). *From Neurons to Neighborhoods: The Science of Early Childhood Development*. National Academies Press.
- 7 Regenstein, E., Marable, B., and Britten, J. (December 1, 2014). "Unlocking the Potential of Children before Kindergarten Entry." Thomas B. Fordham Institute, Education for Upward Mobility Conference Paper, p1 [http://edex.s3-us-west-2.amazonaws.com/Regenstein%20Paper-KLM%20\(1\).pdf](http://edex.s3-us-west-2.amazonaws.com/Regenstein%20Paper-KLM%20(1).pdf).
- 8 Regenstein, E., Romero-Jurado, R., Cohen, J., and Segal, A. (2014). "Changing the Metrics of Turnaround to Encourage Early Learning Strategies." 4. Ounce of Prevention Fund and Mass Insight Education. <http://www.theounce.org/what-we-do/policy/policy-conversations>; Loeb, S., and Bassok, D. (2007). "Early Childhood and the Achievement Gap." In H.F. Ladd and E.B. Fiske, eds. *Handbook of Research in Education Finance and Policy*. <https://cepa.stanford.edu/sites/default/files/Early%20Childhood%20and%20the%20Achievement%20Gap.pdf>; Chmielewski, A.K. & Reardon, S.F. (2016). Education. *Pathways, The Poverty and Inequality Report 2016*, 45-50. <http://inequality.stanford.edu/sites/default/files/Pathways-SOTU-2016-2.pdf>
- 9 The Nation's Report Card, <http://www.nationsreportcard.gov/>.

- 10 Regenstein et al. "Changing the Metrics of Turnaround to Encourage Early Learning Strategies." 5–7; Bornfreund, L., Cook, S., Lieberman, A., and Loewenberg, A. (2015). "From Crawling to Walking: Ranking States on Birth–3rd Grade Policies That Support Strong Readers." *New America*. <https://www.newamerica.org/education-policy/from-crawling-to-walking/>.
- 11 Barnett, W.S., Carolan, M., Squires, J., Clarke Brown, K., and Horowitz, M. (2015). "The State of Preschool 2014," 6. National Institute for Early Education Research 2015. 6. http://nieer.org/sites/nieer/files/Yearbook2014_full3.pdf.
- 12 Regenstein et al. "Changing the Metrics of Turnaround to Encourage Early Learning Strategies." 15–16.
- 13 Marietta, G. (September 2010). "PreK–3rd: How Superintendents Lead Change." Foundation for Child Development, Policy to Action Brief No. 5. <http://fcd-us.org/sites/default/files/FCDSuperintBrief.pdf>. Ounce of Prevention Fund and Illinois Association of School Boards. (November 2015). "Early Learning User's Guide for Illinois School Boards." <http://www.theounce.org/schoolboards>.
- 14 Burkham, D.T., Lee, V.E., and Dwyer, J. (2009). "School Mobility in the Early Elementary Grades." *Vision for Children*. <http://fcd-us.org/sites/default/files/BurkamSchoolMobilityInThe%20EarlyElementaryGrades.pdf>
- 15 Goldring, E., Neumerski, C., Cannata, M., Drake, T., Grisson, J., Rubin, M., and Schuermann, P. (May 2104). "Principals' Use of Teacher Effectiveness Data for Talent Management Decisions." Peabody College, Vanderbilt University <http://principaldatause.org/assets/files/reports/Summary-Report-201405.pdf>; Fuller, S.C., and Ladd, H. (April 2012). "School Based Accountability and the Distribution of Teacher Quality Among Grades in Elementary School." Center for Analysis of Longitudinal Data in Education Research, Working Paper 75 <http://files.eric.ed.gov/fulltext/ED532767.pdf>; Grissom, J.A., Kalogrides, D., and Loeb, S. (2014). "Strategic Staffing: How Accountability Pressures Affect the Distribution of Teachers Within Schools and Resulting Student Achievement." <http://popcenter.uchicago.edu/archived/2014-02-27%20Grissom%20Strategic%20Staffing.pdf>.
- 16 Goldring et al. "Principals' Use of Teacher Effectiveness Data." 9.
- 17 Marietta. "PreK–3rd: How Superintendents Lead Change.," The Pre-K Coalition (December 2011). "Policy Brief: The Importance of Aligning Pre-K through 3rd Grade." Center for Public Education. <http://www.centerforpubliceducation.org/Main-Menu/Pre-kindergarten/Pre-K-Coalition/Policy-Documents/Issue-brief-Dec-2011.pdf>; Buffett Early Childhood Institute. (June 25, 2015). "Superintendents' Early Childhood Plan."
- 18 Burnette II, D. (December 11, 2015). "State Chiefs Say They Will Stay the Course with ESSA Reauthorization." *Education Week*, State EdWatch blog. http://blogs.edweek.org/edweek/state_edwatch/2015/12/state_chiefs_say_they_will_stay_the_course_with_essa_reauthorization.html; Ujifusa, A. (November 30, 2015). "Praise from Governors, State Chiefs Highlight Reactions to ESEA Bill." *Education Week*, Politics K–12. http://blogs.edweek.org/edweek/campaign-k-12/2015/11/praise_from_governors_state_ch.html.
- 19 Aldeman, C. (December 11, 2015). "New K–12 Education Law Leaves Schools Behind." *Washington Post*, Opinions. https://www.washingtonpost.com/opinions/new-k-12-education-law-leaves-schools-behind/2015/12/11/e0ffb894-9f73-11e5-a3c5-c77f2cc5a43c_story.html ; Kress, S. (December 9, 2015). "Every Child Abandoned." *Dropout Nation*. <http://dropoutnation.net/2015/12/09/every-child-abandoned/> ; Gerson, M. (December 28, 2015). "The Every Student Succeeds Act." *Washington Post*, Opinions, https://www.washingtonpost.com/opinions/the-every-student-succeeds-act-will-leave-children-behind/2015/12/28/55a314d8-ad99-11e5-b820-eea4d64be2a1_story.html.
- 20 Every Student Succeeds Act, Sec. 1111(c)(4)(B)(i), (ii), (iv).
- 21 Every Student Succeeds Act, Sec. 1111(c)(4)(C)(ii)(II).
- 22 Klein, Alyson. (November 20, 2015). "Accountability: A Likely Hitch in the New ESEA Deal." *Education Week*. http://blogs.edweek.org/edweek/campaign-k-12/2015/11/accountability_a_likely_hitch_in_ESEA.html

- 23 Every Student Succeeds Act, Sec. 1111(c)(4)(B)(v).
- 24 Pianta, R. C., La Paro, K. M., Payne, C., Cox, M. J., and Bradley, R. (January 2002). "The Relation of Kindergarten Classroom Environment to Teacher, Family, and School Characteristics and Child Outcomes." *Elementary School Journal*, Vol. 102, No. 3, 225–238.
- 25 The Center for Public Education. (November 1, 2005). "Teacher Quality and Student Achievement: Research Review." Prepared by Policy Studies Associates <http://www.centerforpubliceducation.org/Main-Menu/Staffing-students/Teacher-quality-and-student-achievement-At-a-glance/Teacher-quality-and-student-achievement-Research-review.html>; Laitsch, D. (2003). "The Effect of Classroom Practice on Student Achievement." ASCD Research Brief, Vol. 1, No. 11. Association for Supervision and Curriculum Development <http://www.ascd.org/publications/researchbrief/v1n11/toc.aspx>; Hightower, Hightower, A., Delgado, R., Lloyd, S., Wittenstein, R., Sellers, K., and Swanson, C. (December 2011). "Improving Student Learning by Supporting Quality Teaching: Key Issues, Effective Strategies." Editorial Projects in Education Inc. http://www.edweek.org/media/eperc_qualityteaching_12.11.pdf.
- 26 Deming et al., "When Does Accountability Work?" *Education Next*, 76.
- 27 Regenstein and Romero-Jurado. "A Framework for Rethinking State Education Accountability and Support From Birth Through High School.," 7–9; Council of Chief State School Officers. (November 2015). "States' Continued Commitment to Next-Generation Accountability Systems" 4. <http://www.ccsso.org/Documents/CCSSO%20Accountability%20Principles.pdf>
- 28 Council of Chief State School Officers. "States' Continued Commitment"; Council of Chief State School Officers. (2011). "Roadmap for Next-Generation State Accountability Systems." 26 http://www.ccsso.org/Documents/2011/Roadmap_for_Next-Generation_Accountability_2011.pdf
- 29 Chetty, R., Friedman, J., and Rockoff, J. (2014). "Measuring the Impacts of Teachers II: Teacher Value-Added and Student Outcomes in Adulthood." *American Economic Review*, Vol. 104, No. 9, 2633–2679.
- 30 Chetty, R., Friedman, J.N., Hilger, N., Saez, E., Schanzenbach, D.W., and Yagan, D. (2011). "How Does Your Kindergarten Classroom Affect Your Earnings? Evidence From Project Star." *Quarterly Journal of Economics*, Vol. 126, No. 4, 1593–1660; Pianta et al. "Relation of Kindergarten Classroom Environment." 225–238.
- 31 Decades of rigorous research clearly show that children benefit most from early childhood classrooms in which teachers effectively use evidence-based curricula and engage in stimulating interactions that support learning and are emotionally supportive. Mashburn, A.J., Pianta, R.C., Hamre, B.K., Downer, J.T., Barbarin, O., Bryant, D., Burchinal, M. et al Howes, C. (2008). "Measures of Classroom Quality in Prekindergarten and Children's Development of Academic, Language, and Social Skills." *Child Development*, Vol. 79, 732–749; Yoshikawa, H., Weiland, C., Brooks-Gunn, J., Burchinal, M.R., Espinosa, L.M., Gormley, W.T., et al. Zaslow, M.J. (2013). "Investing in Our Future: The Evidence Base on Preschool Education." Policy brief. Society for Research in Child Development and Foundation for Child Development. <http://fcd-us.org/sites/default/files/Evidence%20Base%20on%20Pre-school%20Education%20FINAL.pdf>.
- 32 US Department of Health and Human Services. (2011). "Policies and Procedures for Designation Renewal of Head Start and Early Head Start Grantees." 45 CFR Part 1307. <http://eclkc.ohs.acf.hhs.gov/hslc/standards/hsp/1307>.
- 33 The Build Initiative & Child Trends. (2014). "A Catalog and Comparison of Quality Rating and Improvement Systems (QRIS)." <http://qriscompendium.org/>.
- 34 Pianta, R., Mashburn, A., Downer, J., Hamre, B., and Justice, L. (2008). "Effects of Web-Mediated Professional Development Resources on Teacher-Child Interactions in Pre-Kindergarten Classrooms." *Early Childhood Research Quarterly*, Vol. 23, No. 4, 431–451.

- 35 Pianta, R. C., LaParo, K. M., and Hamre, B. K. (2008). *Classroom Assessment Scoring System (CLASS) Manual: Pre-K*. Baltimore: Brookes Publishing.
- 36 Pianta, R. C., LaParo, K.M., and Hamre, B. K. (2008). *Classroom Assessment Scoring System (CLASS) Manual: K-3*. Baltimore: Brookes Publishing.
- 37 Danielson, C. (2002). *Enhancing Student Achievement: A Framework for School Improvement*. Alexandria, VA: Association for Supervision and Curriculum Development.
- 38 Pianta, R. C., and Hamre, B. K. (2009). "Conceptualization, Measurement, and Improvement of Classroom Processes: Standardized Observation Can Leverage Capacity." *Educational Researcher*, Vol. 38, No. 2, 109–119.
- 39 Kane, T. J., McCaffrey, D. F., Miller, T., and Staiger, D.O. (2013). "Have We Identified Effective Teachers? Validating Measures of Effective Teaching Using Random Assignment." MET Project Research Paper, Bill & Melinda Gates Foundation; Zaslow, M., Anderson, R., Redd, Z., Wessel, J., Tarullo, L., and Burchinal, M. (2010). *Quality Dosage, Thresholds, and Features in Early Childhood Settings: A Review of the Literature*, OPRE 2011-5. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, US Department of Health and Human Services.
- 40 For example, New Jersey's Department of Education has prepared "First Through Third Grade Implementation Guidelines" to support quality instruction in the early elementary grades. <http://www.state.nj.us/education/ece/rttt/ImplementationGuidelines1-3.pdf>.
- 41 Christakis, E. (January 2016). "The New Preschool Is Crushing Kids." *The Atlantic*. <http://www.theatlantic.com/magazine/archive/2016/01/the-new-preschool-is-crushing-kids/419139/>; National Association for the Education of Young Children. (2009). "Developmentally Appropriate Practice in Early Childhood Programs Serving Children From Birth Through Age 8." National Association for the Education of Young Children. <https://www.naeyc.org/files/naeyc/file/positions/position%20statement%20Web.pdf>.
- 42 "New Principals: A Data Snapshot." (August 18, 2015). Education Week. National Association of Elementary School Principals, and 2B Communications. <http://www.edweek.org/ew/section/multimedia/new-principals-a-data-snapshot.html>; Loewenberg, A. (August 31, 2015). "Many New Principals Lack Early Ed Knowledge." New America EdCentral. <http://www.edcentral.org/elem-principals-prek/>; Mead, S. (April 2011). "PreK-3rd: Principals as Crucial Instructional Leaders." Policy to Action Brief No. 7. Foundation for Child Development <http://fcd-us.org/sites/default/files/FCD%20PrincipalsBrief7.pdf>.
- 43 Mashburn, A.J. et al. Howes, C. (2008). "Measures of Classroom Quality in Prekindergarten and Children's Development of Academic, Language, and Social Skills." *Child Development*, Vol. 79, 732–749; Yoshikawa et al. "Investing in Our Future."
- 44 Regenstein, E., Marable, B., and Britten, J. (December 1, 2014). "Unlocking the Potential of Children Before Kindergarten Entry," 3. Thomas B. Fordham Institute, Education for Upward Mobility Conference Paper. [http://edex.s3-us-west-2.amazonaws.com/Regenstein%20Paper-KLM%20\(1\).pdf](http://edex.s3-us-west-2.amazonaws.com/Regenstein%20Paper-KLM%20(1).pdf) p.3 (citing LaParo, K., Hamre, B., LoCasale-Crouch, J., Pianta, R., Bryant, D., and Early, D. (2009). "Quality in Kindergarten Classrooms: Observational Evidence for the Need to Increase Children's Learning Opportunities in Early Education Classroom." *Early Education and Development* Vol. 20, No. 4, 657–92; Zaslow, M., Tout, K., and Halle, T. (2010). *Toward the Identification of Features of Effective Professional Development for Early Childhood Educators: Literature Review*. Washington, DC: US Department of Education, Office of Planning, Evaluation and Policy Development, Policy and Program Studies Service; see also Dealy, K., Pacchiano, D., and Shimpi, P. (2007). "The Language of Babies, Toddlers, and Preschoolers: Connecting Research to Practice." Ounce of Prevention Fund.)

- 45 Regenstein et al. "Unlocking the Potential of Children before Kindergarten Entry," 3. [http://edex.s3-us-west-2.amazonaws.com/Regenstein%20Paper-KLM%20\(1\).pdf](http://edex.s3-us-west-2.amazonaws.com/Regenstein%20Paper-KLM%20(1).pdf) (citing Hirsh-Pasek, K., Golinkoff, R., Berk, L., and Singer, D. [2008]. *A Mandate for Playful Learning in Preschool: Presenting the Evidence*. New York: Oxford University Press; LaParo, et al. "Quality in Kindergarten Classrooms": Observational Evidence for the Need to Increase Children's Learning Opportunities in Early Education Classrooms," *Early Education and Development* 20, no. 4 (2009): 657–92; Mendez, J.L. (2010). "How Can Parents Get Involved in Preschool? Barriers and Engagement in Education by Ethnic Minority Parents of Children Attending Head Start." *Cultural Diversity and Ethnic Minority Psychology*, Vol. 16, No. 1, 26–36; Howard, R.C. (2011). "Moving Forward With Kindergarten Readiness Assessment Efforts: A Position Paper of the Early Childhood Education State Collaborative on Assessment and Student Standards." Council for Chief State School Officers. <http://eric.ed.gov/?id=ED543310>; Hamre, B.K., and Pianta, R.C. (2010). "Early Teacher–Child Relationships and the Trajectory of Children's School Outcomes Through Eighth Grade." *Child Development*, Vol. 72, No. 2, 625–38; Palermo, F., Hanish, L., Martin, C., Fabes, R., and Reiser, M. (2007). "Preschoolers' Academic Readiness: What Role Does the Teacher-Child Relationship Play?" *Early Childhood Research Quarterly*, Vol. 22, No. 4, 407–422.)
- 46 Regenstein et al. "Unlocking the Potential of Children before Kindergarten Entry," 3 (citing Shonkoff, J.P., and Phillips, D.A., eds. [2000]. *From Neurons to Neighborhoods: The Science of Early Childhood Development*. Washington, DC: National Academies Press).
- 47 Regenstein et al. "Unlocking the Potential of Children, before Kindergarten Entry" 3 (citing footnote, Office of Head Start. [2008]. "Dual Language Learning: What Does It Take? Head Start Dual Language Report." Office of Head Start, Administration for Children and Families, US Department of Health and Human Services. http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/eecd/individualization/learning%20in%20two%20languages/dlana_final_2009%5B1%5D.pdf
- 48 Regenstein and Romero-Jurado. "A Framework for Rethinking State Education Accountability and Support from Birth through High School," 5–6, discussing Sebring, P., Allensworth, E., Bryk, A., Easton, J., and Luppescu, S. (2006). "The Essential Supports for School Improvement," 10. Consortium on Chicago School Research. <http://www.theounce.org/what-we-do/policy/policy-conversations>.
- 49 For a review, see Regenstein and Romero-Jurado, "A Framework for Rethinking State Education Accountability and Support from Birth through High School." 5–6.
- 50 Sebring et al. "The Essential Supports for School Improvement." Consortium on Chicago School Research. 10.
- 51 Regenstein et al. "Changing the Metrics of Turnaround to Encourage Early Learning Strategies." 7–9 (summarizing the research).
- 52 Bryk, A.S., Sebring, P.B., Allensworth, E., Luppescu, S., and Easton, J.Q. (2010). *Organizing Schools for Improvement: Lessons From Chicago*. Chicago: University of Chicago Press.
- 53 Nathanson, L., McCormick, M., and Kemple, J.J. (2013). *Strengthening Assessments of School Climate: Lessons From the NYC School Survey*. New York: Research Alliance for New York City Schools; UChicago Impact. (2016). *Background, Predictive Validity, and Reliability: 5Essentials*. UChicago Impact. <http://files.eric.ed.gov/fulltext/ED543180.pdf>
- 54 Pacchiano, D., Ehrlich, S., Stein, A., and Luppescu, S. (2015). *Five Essentials—Early Education Measurement System*. Chicago: Ounce of Prevention Fund and University of Chicago Consortium on Chicago School Research; Whitebook, M., and Ryan, S. (2012). *Supportive Environmental Quality Underlying Adult Learning (SEQUAL)*. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley.
- 55 Regenstein, E. and Romero-Jurado, R. "A Framework for Rethinking State Education Accountability and Support from Birth through High School." 15–17.

- 56 Ibid.
- 57 Chang, H. N., and Romero, M. (2008). *Present, Engaged, and Accounted For: The Critical Importance of Addressing Chronic Absence in the Early Grades*. New York: National Center for Children in Poverty: The Mailman School of Public Health at Columbia University; Connolly, F., and Olson, L.S. (2012). *Early Elementary School Performance and Attendance in Baltimore City Schools' Pre-Kindergarten and Kindergarten*. Baltimore: Baltimore Education Research Consortium; Gottfried, M.A. (2014). "Chronic Absenteeism and Its Effects on Students' Academic and Socioemotional Outcomes." *Journal of Education for Students Placed at Risk*, Vol. 19, 53–75. <http://www.tandfonline.com/doi/abs/10.1080/10824669.2014.962696?journalCode=hjosp20>.
- 58 Blad, E. (January 5, 2016). "ESSA Law Broadens Definition of School Success." Education Week. <http://www.edweek.org/ew/articles/2016/01/06/essa-law-broadens-definition-of-school-success.html>.
- 59 Ibid.
- 60 Yiang, J. and Spote, S. (2016) Teacher Evaluation in Chicago: Differences in Observation and Value-Added Scores by Teacher, Student, and School Characteristics. Chicago: UChicago Consortium on School Research. <https://consortium.uchicago.edu/sites/default/files/publications/Teacher%20Evaluation%20in%20Chicago-Jan2016-Consortium.pdf>. Hansen, M. (January 4, 2016). "New School Accountability Measures Must Be Careful Not to Reinforce Student Poverty." Brown Center Chalkboard, Brookings Institution. <http://www.brookings.edu/blogs/brown-center-chalkboard/posts/2016/01/04-implementing-essa-accountable-more-than-a-test-hansen>.
- 61 Regenstein, E. and Romero-Jurado, R. "A Framework for Rethinking State Education Accountability and Support from Birth through High School." 7–9, 26–27.
- 62 Ibid.
- 63 Regenstein, E. and Romero-Jurado, R. "A Framework for Rethinking State Education Accountability and Support from Birth through High School." 11–13, 29–31.
- 64 Burnette, D., II. (January 5, 2016). "States, Districts to Call Shots on Turnarounds Under ESSA." Education Week. <http://www.edweek.org/ew/articles/2016/01/06/states-districts-to-call-shots-on-turnarounds.html>.
- 65 Regenstein et al. "Changing the Metrics of Turnaround to Encourage Early Learning Strategies." 17–24.
- 66 Yoshikawa et al. "Investing in Our Future: The Evidence Base on Preschool Education." Ann Arbor, MI: Society for Research in Child Development and the Foundation for Child Development. <http://fcd-us.org/sites/default/files/Evidence%20Base%20on%20Preschool%20Education%20FINAL.pdf>.
- 67 Regenstein, E., and Lipper, K. (2013). "A Framework for Choosing a State-Level Early Childhood Governance System." Build Initiative. <http://www.buildinitiative.org/Portals/0/Uploads/Documents/Early%20Childhood%20Governance%20for%20Web.pdf>.