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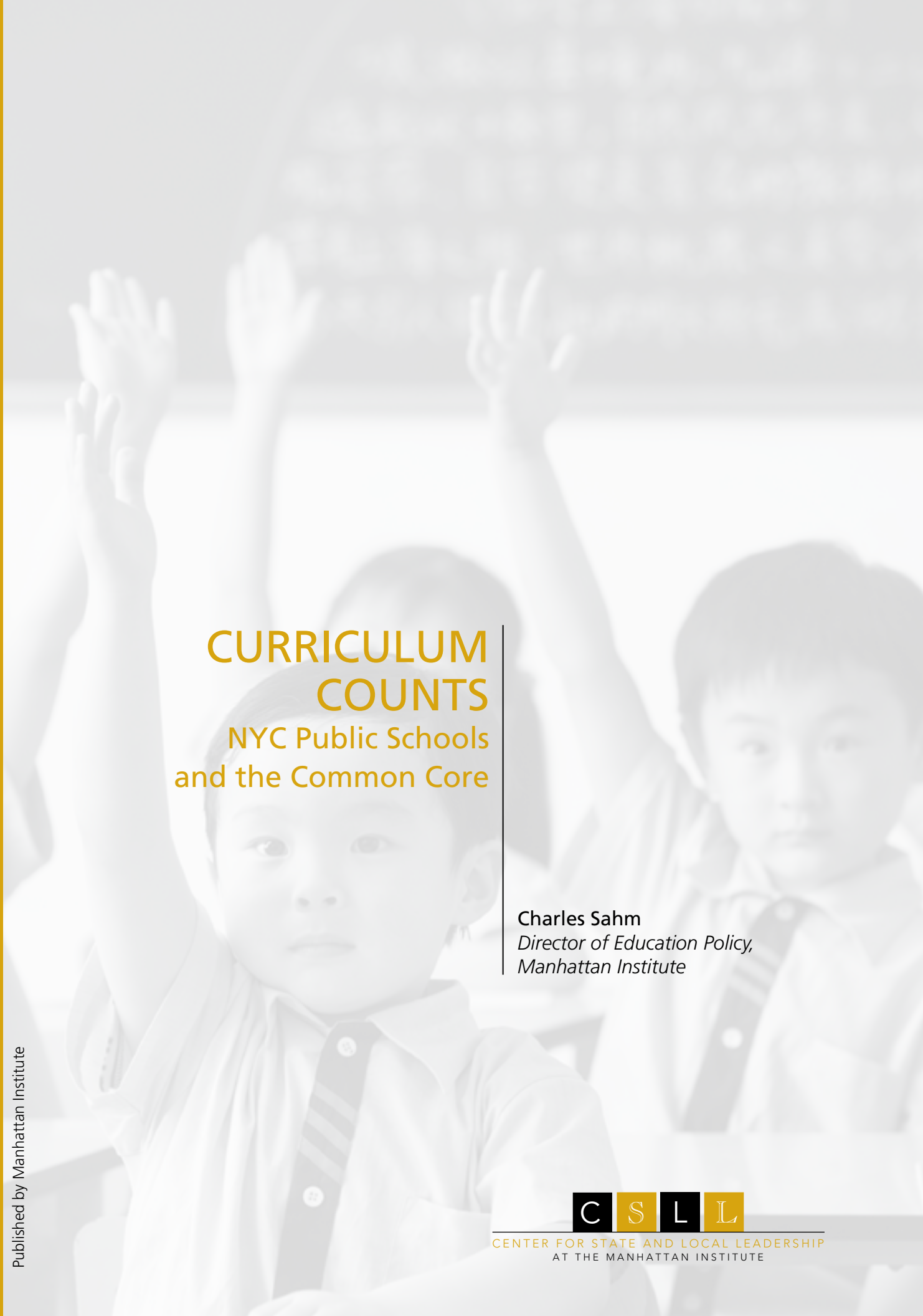

CURRICULUM COUNTS

NYC Public Schools and the Common Core

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Executive Summary

Recent research suggests that well-designed, content-rich instructional materials can have as positive an impact on student learning as can high-quality teachers.[1] As school districts across the U.S. endeavor to implement the Common Core State Standards (CCSS, or Common Core), the issue of curriculum quality has become even more important.

This paper examines NYC elementary and middle schools' math and English language arts (ELA) curricula decisions in response to CCSS implementation. The author's findings are based on information derived from an online survey[2] e-mailed to NYC's 1,168 elementary and middle school principals,[3] a focus group conducted with eight NYC principals, and interviews with current and former officials at the New York City Department of Education (NYC DOE) and numerous other curricula experts. This paper finds that NYC has taken the adoption of Common Core seriously and—notwithstanding controversy over state tests and their use in teacher evaluations[4]—that curricula implementation has largely proceeded smoothly. Key findings include:

1. **Information scarce on curricula choices.** While NYC collects data on its schools' curricula procurement choices, it largely remains in the dark on the extent to which such curricula are used in classrooms.
2. **DOE-recommended choices largely followed.** If survey results are extrapolated for all NYC elementary and middle schools, roughly two-thirds have likely switched to NYC DOE–recommended ELA and math curricula. Further, low-performing schools appear more likely than high-performing schools to have switched to recommended options: the latter face few incentives to change curricula; and the former, strong incentives.
3. **Principals largely satisfied with Common Core.** If survey results are extrapolated for all NYC elementary and middle schools, the majority of NYC principals are likely satisfied with their curricula choices and believe that their teachers are faithfully implementing principals' choices. Likewise, the majority of NYC principals value the curricula guidance offered by the city (via its Common Core Library website) and state (via its EngageNY website).

This paper concludes with the following recommendations:

1. **Collect data on curricula choices.** New York State already requires schools to complete an annual survey—the results of which are published on the state's website. NYC collects reams of data from city schools, too. Adding curricula-related questions to such data-collection efforts could be done at minimal cost.
2. **Hire an analytical research firm to review curricula.** What curricula are most effective? Few have been subjected to rigorous, empirical tests. Indeed, simply establishing a correlation between curricula and student achievement would be a great step forward.
3. **Mandate that schools post curricula choices on their websites.** Parents deserve to know—and should not have to jump through hoops to find out.
4. **Encourage education charities to finance such efforts.** Major philanthropic organizations, such as the Bill and Melinda Gates Foundation, that have invested heavily in Common Core should support curricula information collection efforts as well as empirical research on the relative effectiveness of various curricula.

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CHARLES SAHM is director of education policy at the Manhattan Institute. Previously, he helped lead the Institute's development team. Before joining MI, Sahm worked for a number of elected officials and education nonprofits. His writing on education, policing, and other public-policy issues has appeared in numerous newspapers, magazines, and websites, including the *Los Angeles Times*, *New York Post*, *New York Daily News*, Daily Beast, and *City Journal*.

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INTRODUCTION

The movement to improve the quality of American K–12 education has largely focused on important systemic reforms: teacher quality, school- and teacher-accountability mechanisms, charter schools, and parent-based school choice. In the process, two important questions have been neglected: What is being taught? And how is it being taught? The Brookings Institution's Matthew Chingos and Grover Whitehurst state: "It's as if the medical profession worried about the administration of hospitals and patient insurance but paid no attention to the treatments that doctors give their patients."[5]

Well-designed, content-rich instructional material can have as great an impact on student learning as high-quality teachers[6]—particularly as numerous school districts endeavor to implement CCSS. The Common Core State Standards are a set of broad learning goals, not a specific curriculum:[7] they specify what children should know at the end of each grade, including the skills they must acquire for college and career readiness.[8] Acknowledging the important American tradition of local control of education, the National Governors Association and the Council of Chief State School Officers, the organizations responsible for developing Common Core, went to great lengths to ensure that Common Core did not resemble a curriculum: "While the Standards focus on what is most essential, they do not describe all that can or should be taught. A great deal is left to the discretion of teachers and curriculum developers. The aim of the Standards is to articulate the fundamentals, not to set out an exhaustive list or a set of restrictions that limits what can be taught beyond what is specified herein."[9]

This paper examines the math and ELA curricula decisions being made in NYC, the largest U.S. school district, in response to Common Core. It addresses why NYC's principals select certain curricula; their level of satisfaction with their selections; the extent to which they believe teachers are faithfully implementing their selections; and the degree to which teachers use the state's EngageNY website and the city's Common Core Library website.

To address such questions, the paper incorporates feedback from an online survey e-mailed to all NYC elementary and middle school principals in early 2015; a late 2014 focus group with eight NYC elementary and middle school principals serving diverse communities in Manhattan, Queens, Brooklyn, and the Bronx; and interviews with current and former officials at the NYC DOE and numerous other curricula experts.[10] This paper also discusses other important curricula-related questions, including: How do districts know if curricula are well developed, content-rich, and aligned with Common Core? And how do districts ascertain whether particular curricula improve student achievement? The paper concludes with policy recommendations.

Low-performing schools were more likely to adopt NYC DOE–recommended curricula than high-performing schools.

I. NYC CURRICULA: A BRIEF HISTORY

NYC's K–8 grade school system—the focus of this paper—consists of 1,168 non-charter elementary and middle schools serving students in at least one grade.[11] In the late 1960s, when NYC schools moved to a system of local control, superintendents of the city's 32 community school districts (chosen, in turn, by their respective school boards) became the primary decision makers regarding curricula choices, with principals enjoying varying degrees of autonomy over the selection of instructional materials.

In 2002, Mayor Bloomberg persuaded the New York State legislature to give him direct control of NYC's public schools.[12] In January 2003, Bloomberg and schools chancellor Joel Klein announced an elaborate "Children First" plan to centralize the city's school system: district superintendents were replaced with ten regional superintendents; and all elementary and middle schools would use the same curricula (for ELA, Columbia University's Teachers College Reading and Writing Workshop; for math, the University of Chicago's Everyday Math).[13] Principals of certain high-performing schools were granted waivers.

In 2005, Klein again restructured the system, loosening control, unloading regional superintendents in favor of networks that provided instructional and operational support, and empowering principals with nearly complete autonomy, including over curricula decisions.[14] But Teachers College Reading and Writing Workshop and Everyday Math remained the dominant curricula in NYC elementary and middle schools. And while NYC schools began to see achievement in many areas, reading scores remained flat on federal exams.[15]

In 2008, Klein introduced a pilot implementation of the Core Knowledge reading program in ten schools in grades K–2. He matched these schools with a demographically similar cohort of schools, which mostly used the then-dominant Reading and Writing Workshop. Over three years, Core Knowledge students made reading gains twice as great as those of control-group students.[16] In 2010–11, New York State adopted Common Core, which encouraged districts across the state to take a fresh look at the strength of their curricula offerings, including whether they were well aligned with the new learning standards. The state also began to invest considerable resources in developing model Common Core–aligned curricula.[17] Meanwhile, NYC began an intensive research process to find high-quality Common Core–aligned curricula, with 300 city teachers working with national experts, districts

across the U.S., and NYC DOE staff, among others, to evaluate a wide array of curricula.[18]

In February 2013, NYC's DOE released a list of math and ELA curricula that it recommended for elementary and middle schools seeking to better align their curricula and instruction with Common Core:[19]

- Math: Houghton Mifflin Harcourt's Go Math! (K–5); and Pearson's Connected Math Program 3 (6–8)
- ELA: New York State's Core Knowledge or Pearson's ReadyGen (K–2);[20] New York State's Expeditionary Learning or Pearson's ReadyGen (3–5); and New York State's Expeditionary Learning or Scholastic's Code X (6–8).

II. NYC CURRICULA: 2014–15

The author, as noted, endeavored to ascertain 2014–15 math and ELA curricula choices in response to Common Core and NYC DOE recommendations: 65 of NYC's 1,168 elementary and middle school principals responded, of which 54 serve grades K–2, 52 serve grades 3–5, and 26 serve grades 6–8.[21] (Because many principals serve students in more than one grade band, the total exceeds 65.)[22]

Roughly two-thirds of respondents reported switching to recommended options: in math, 63 percent in grades K–2, 67 percent in grades 3–5, and 71 percent in grades 6–8; in ELA, 65 percent in grades K–2, 71 percent in grades 3–5, and 81 percent in grades 6–8.

Math. In grades K–2 (54 schools, 56 curriculum mentions), 63 percent of principals used the recommended Go Math!, 9 percent used enVisionMATH, 9 percent used a school-created curriculum, 7 percent used Math in Focus, 6 percent used Investigations, 4 percent used Eureka Math, and one principal each used Singapore Math, Foundations, and Number Talks.

In grades 3–5 (52 schools, 53 curriculum mentions), 67 percent of principals used the recommended Go Math! curriculum, 10 percent used enVisionMATH, 8 percent used Math in Focus, 6 percent used Investigations, 6 percent used a school-created curriculum, and one principal each used Singapore Math, Eureka Math, and Number Talks. In grades 6–8 (21 schools, 23 curriculum mentions), 71 percent of principals used the recommended Connected Math curriculum, 19 percent used Go Math!, 10 percent used Eureka Math, and 10 percent used a school-created curriculum.

ELA. In grades K–2 (54 schools, 61 curriculum mentions), 50 percent of principals used the recommended ReadyGen curriculum, 15 percent used the recommended Core Knowledge, 22 percent used the Teachers College Reading and Writing Workshop, 15 percent used a school-created curriculum, 2 principals used Journeys, and one principal each used Storytown and Code X.

In grades 3–5 (52 schools, 56 curriculum mentions), 50 percent of principals used the recommended ReadyGen curriculum, 21 percent used the recommended Expeditionary Learning, 21 percent used the Teachers College Reading and Writing Workshop, 12 percent used a school-created curriculum, two principals used Journeys, and one principal each used Core Knowledge and Storytown. In grades 6–8 (21 schools, 22 curriculum mentions), 48 percent of principals used the recommended Code X curriculum, 33 percent used the recommended Expeditionary Learning, 19 percent used a school-created curriculum, and one principal used Teachers College Reading and Writing Workshop.

Curricula Procurement Data. This paper's findings mostly mirror the 2014–15 curricula procurement data provided by the NYC DOE.[23] For math-related curricula, 600 of NYC's 808 schools serving students in at least one K–5 grade, or 74 percent, purchased Go Math!; and 267 of 529 schools serving students in at least one 6–8 grade, or 50 percent, purchased Connected Math Program 3.

For ELA-related curricula, 426 of NYC's 808 schools serving students in at least one K–5 grade, or 53 percent, purchased ReadyGen; 80 of 788 schools

serving students in at least one K–2 grade, or 10 percent, purchased Core Knowledge; 229 of 1,135 schools serving students in at least one 3–8 grade, or 20 percent, purchased Expeditionary Learning; and 162 of 529 schools serving students in at least one 6–8 grade, or 31 percent, purchased CodeX.

III. TO SWITCH OR NOT TO SWITCH?

Despite scarce information on how curricula decisions are made, as well as which curricula schools select, this paper's survey, its interviews with numerous experts,[24] and its focus group with eight NYC principals offer revealing insights.

Academic Performance. Low-performing schools[25] were more likely to adopt NYC DOE–recommended curricula than high-performing schools. This outcome was created by the curricula incentive structure implemented by NYC's DOE (see Section VII): if their old curricula worked well, schools were free to keep them; principals of struggling schools, however, felt pressure to switch because they knew that they would be held accountable if they kept their old curricula and their students' performance did not improve.

Financial Incentives. NYC principals receive New York State Textbook Law (NYSTL) funding annually,[26] though such funding is insufficient to cover the full costs of replacing math and ELA curricula. In 2013, NYC offered to provide schools with recommended math and ELA curricula in exchange for schools' 2013–14 NYSTL funds—in effect, topping up their NYSTL funding if schools agreed to switch to recommended curricula.

Pearson Effect. Some respondents switched to Connected Math Program 3 (math) and ReadyGen (ELA) because they are supplied by Pearson, the same company hired to develop state assessments for grades 3–8—thus (presumably) making the aforementioned curricula better aligned with state exams.

Professional Development. Curricula providers offer varying levels and quality of professional development, a motivating factor for certain respondents. While large, for-profit providers generally offer greater levels of support than do smaller, nonprofit providers, several respondents cited the valued support provided by the Teachers College Reading and Writing Workshop for their decision to keep that curriculum, despite NYC DOE recommendations.

Rollout Concerns. Some respondents who did not switch to NYC DOE–recommended curricula cited worries over the risk of a potentially uneven rollout. Among respondents who *did* switch, some reported that teacher training in the new curricula was insufficient and that materials arrived late. One curriculum, for instance, was not finished by the fall of 2013 and was, instead, sent to schools unit by unit. (Respondents also noted that professional development and curricula delivery have since improved.)

IV. NYC CHARTER SCHOOLS

Though NYC charters do receive NYSTL funding to purchase instructional materials, charters are not controlled by the NYC DOE. Survey results suggest that most charters were only vaguely aware of NYC DOE recommendations and instead used a wide variety of curricula in 2014–15, much of it school- or network-created.

In their responses, leaders of some of NYC's largest charter networks acknowledged that the challenging new Common Core–aligned exams have increased their focus on the need for quality curricula and rich academic content. The KIPP network, for example, used to leave curricula decisions largely up to individual schools. Now it encourages principals to use Eureka Math, a new, highly rated math curriculum produced by the nonprofit Great Minds.[27] To date, half of KIPP's K–8 principals have switched. KIPP is also working with Great Minds to create a new K–8 English curriculum, designed to build student knowledge systematically through the use of high-quality works of literature, nonfiction, and informational texts.

Two high-performing charter networks—Success Academy Charter Schools and Icahn Charter Schools—employ the type of rigorous, coherent, content-rich curriculum called for by Common Core.

Success Academy has developed its own ELA curriculum, THINK Literacy, which emphasizes independent reading and is infused with the type of content that builds background knowledge. Success Academy developed its own math curriculum by adapting lessons from various curricula, such as TERC Investigations, as well as by creating much on its own.

Icahn Charter Schools use the Core Knowledge Sequence—a pre-K–8 outline of what students should learn in ELA, world and American history, geography, math, science, and art—to ensure that students develop the broad academic knowledge and vocabulary base needed for reading comprehension and critical thinking. For math, Icahn Charter Schools use Pearson's enVisionMATH 2.0 (K–6), McGraw Hill's Glencoe Math (7–8), and, increasingly, Eureka Math instructional materials (K–8).

NYC's carrot-and-stick approach to curricula—recommendations and accountability but no mandates—has worked well and might be considered elsewhere.

V. IMPLEMENTATION

The varying degrees to which teachers successfully implement curricula make it difficult to assess curricula effectiveness. This paper's survey asked principals how closely their teachers follow curricula: on math, 52 percent responded "very closely," 32 percent "somewhat closely," 5 percent "not too closely," 0 percent "not too closely at all," and 11 percent said "not sure" or did not respond; on ELA, 49 percent responded "very closely," 35 percent "somewhat closely," 6 percent "not too closely," and 9 percent said "not sure" or did not respond.

The survey also queried principals on their level of satisfaction with their current curricula: on math, 32 percent responded "very satisfied," 40 percent "satisfied," 15 percent "neither satisfied nor dissatisfied," 3 percent "dissatisfied," and 9 percent did not respond; on ELA, 28 percent responded "very satisfied," 37 percent "satisfied," 17 percent "neither satisfied nor dissatisfied," 11 percent "dissatisfied," 1 percent "very dissatisfied," and 6 percent did not respond.

As such, more principals reported being "very satisfied" or "satisfied" with their math curriculum (72 percent) than "very satisfied" or "satisfied" with their ELA curriculum (65 percent). Nor, in general, was there a strong correlation between particular math and ELA curricula and principal satisfaction rates. (ReadyGen, used by six of eight principals who reported being "dissatisfied" or "very dissatisfied" with their ELA curriculum, proved the exception.) Principals were also asked if their schools' websites display information on their math and ELA curricula offerings: 68 percent responded no, 25 percent yes, and 7 percent did not respond.[28]

VI. GUIDANCE

In 2010, New York State won $700 million from the federal government as part of the Obama administration's Race to the Top grants competition. The state used a portion of the award to create EngageNY, a free website housing exemplar K–12 Common Core–aligned curricula. New York, the only state to use Race to the Top funds on curricula, has seen EngageNY become the most heavily trafficked curricula-content website in the United States.[29] EngageNY has also supported the development of new or modified Common Core–aligned curricula, including Core Knowledge Language Arts, Expeditionary Learning, and Eureka Math.

EngageNY has attracted more than 21 million visits, 8.5 million unique visitors, and 119 million page views.[30] Its math- and ELA-curriculum modules have been downloaded more than 20 million times, with the majority of downloads from outside New York State. Survey respondents were asked how frequently their teachers use EngageNY: 9 percent said "often," 26 percent "regularly," 48 percent "sometimes," 6 percent "rarely," 2 percent "never," and 9 percent did not respond. In the paper's focus group, principals noted the usefulness of EngageNY but also lamented the time and cost required to download, print, and copy materials from the website.

In 2011, NYC's DOE launched the Common Core Library, a website offering a range of professional learning resources, including curriculum units, assessment tasks aligned to Common Core, and dozens of training modules. To date, Common Core Library has received more than 2.3 million visits, 760,000 unique visitors, and 5.5 million page views from NYC and across the country.[31] Survey respondents were asked how frequently their teachers use Common Core Library: 3 percent said "often," 12 percent "regularly," 58 percent "sometimes," 15 percent "rarely," 2 percent "never," and 9 percent did not respond.

The first step in researching curricula effectiveness is to document what curricula are used. Yet no states collect and publish information on math and ELA curricula purchases.

VII. A NATIONAL MODEL?

This paper's findings suggest that NYC's current carrot-and-stick approach to curricula—recommendations and accountability but no mandates—has worked well and might be considered by other jurisdictions. The carrot: essentially free new curricula and the reassurance offered by the NYC DOE seal of approval. The stick: if recommended curricula are not adopted, principals will be held responsible, based on Common Core–aligned testing.

In other words, principals from high-performing schools retain the option of using non-recommended curricula if the latter work well for them. Should scores fall, however, principals also know that they will be held accountable for not using Common Core–aligned curricula. Likewise, principals from low-performing schools—who face few incentives to maintain the curricula status quo—wishing to change to recommended curricula are thus insulated from potential controversy by the NYC DOE, including parental opposition to change.

This paper's survey results suggest that roughly two-thirds of NYC elementary and middle schools have switched ELA and math curricula to NYC DOE–recommended options. Further, despite logistical problems associated with the initial rollout and continued controversy over the quality of state exams, the emphasis placed upon such exams, and whether student test scores should affect teachers' evaluations, the majority of respondents expressed satisfaction with their Common Core–aligned curricula. As discussed in Section VIII, some state departments of education are beginning to pursue NYC's curricula strategy, offering school districts more autonomy over instructional materials but encouraging them to make more informed curricula decisions.

VIII. ALIGNMENT

The process by which schools select curricula varies across the United States.[32] Nineteen states are considered "adoption states," with states identifying curricula that local districts may purchase using state funds. The remaining 31 states, including New York, offer districts greater latitude in selecting instructional materials, with states issuing learning standards and districts selecting instructional materials to best meet such standards. Since the advent of Common Core, many states—including California, Florida, and Texas—have greatly reduced their authority over districts' curricula choices and have instead increased assistance to help districts make more informed curricula decisions, such as providing rigorous state-level reviews of materials, creating state curricula frameworks, and designating exemplar curricula.[33]

In 2012, Louisiana repealed its requirement that school districts purchase instructional material from an approved list. The state conducted an extensive analysis to determine which curricula are well aligned with Common Core, using rubrics influenced by the Revised Publishers' Criteria (developed by Student Achievement Partners): only one math curriculum, Eureka Math, was deemed worthy of

a top-tier ranking in all grades; similarly, only one ELA curriculum, Core Knowledge, was found worthy of a top-tier ranking.[34]

Despite curricula publishers' frequent assertions of alignment with Common Core, such claims are often inaccurate. For example, William Schmidt of Michigan State University's Center for the Study of Curriculum reviewed 34 commonly used math textbook series and discovered that none were well aligned with Common Core math standards.[35] Morgan Polikoff of the University of Southern California reached a similar conclusion in his review of fourth-grade Florida math textbooks that claimed to be Common Core–aligned.[36]

Numerous groups are working to identify quality Common Core–aligned curricula. The National Council of Teachers of Mathematics and the National Council of Teachers of English have designed websites and issued publications offering guidance. America's two largest teachers' unions, the American Federation of Teachers and the National Education Association, offer guidance.[37] Educators Evaluating Quality Instructional Products (EQuIP), an initiative of Achieve, a nonprofit involved in establishing Common Core, and Student Achievement Partners (SAP), whose founders were also instrumental in creating Common Core, offer free online tools to help determine Common Core alignment. In the coming months, the Thomas B. Fordham Institute, an influential education policy think tank, will release curricula reviews, too.

EdReports.org is a particularly promising nonprofit that conducts consumer report–style curricula reviews by experienced classroom teachers, principals, and instructional coaches. In March 2015, EdReports issued its first report[38] on K–8 math curricula: of the 20 curricula reviewed, only Eureka Math met EdReports' alignment criteria for all grade levels.[39] EdReports has won praise for ensuring that at least half of its reviewers are practicing teachers—whose perspectives are often insufficiently considered in curricula discussions.[40] Despite continued objections to Common Core itself, the standards have, at the very least, helped refocus attention on the importance of quality, content-rich, well-sequenced instructional materials. One hopes that the efforts of the aforementioned organizations will assist district leaders, principals, and teachers to make more informed curricula choices.

IX. EFFECTIVENESS

While there is growing guidance on what materials are well aligned with Common Core, empirical evidence of their effectiveness in boosting student performance remains in short supply. While some studies examining effectiveness are available on the U.S. Department of Education's What Works Clearinghouse website, "the vast majority of elementary school mathematics curricula," note Chingos and Whitehurst, "…either have no studies of their effectiveness or have no studies that meet reasonable standards of evidence."[41] Deploying large-scale randomized experiments to determine the effectiveness of a particular curriculum is expensive and time-consuming; the recent explosion of web-based curricula and supplementary materials may make empirical evaluations more difficult still.

Respected research firm Mathematica recently conducted a randomized control trial of four elementary math curricula, following students through grades one and two. Students in three of the programs, Math Expressions, Saxon Math, and enVisionMATH, achieved similar scores. Student performance in the fourth, Investigations, lagged by a statistically significant amount: a student at the 50th percentile who received instruction in Investigations in grades one and two, Mathematica found, would have scored at the 59th percentile if taught from one of the three other programs.[42]

Cory Koedel of the University of Missouri conducted two large-scale studies, in Florida and in Indiana, of curricula effectiveness. In his Florida study, he found that Harcourt Math, the most popular elementary math curriculum during the 2004 adoption cycle, was more effective than alternatives.[43] In Indiana, Koedel evaluated the two most popular elementary math curricula: students exposed to Silver-Burdett Ginn outperformed

those exposed to Saxon Math. Despite the performance gap, Silver-Burdett Ginn did not gain market share in the following adoption cycle—further evidence that educational decision makers lack information about differences in curricula effectiveness.[44] Another empirical study, by the University of Chicago Consortium on Chicago School Research, examined Chicago high schools that had implemented the International Baccalaureate (IB) curriculum: the longitudinal analysis found that IB students were 40 percent more likely to attend a four-year college, compared with students in a matched comparison group.[45]

Such studies, however, account for the bulk of recent research on curricula effectiveness.[46] If researchers—and the government and philanthropic organizations that finance them—instead dedicated a fraction of the resources they now devote to studying teacher effectiveness to studying curricula effectiveness, school administrators would be far better equipped to choose the best instructional materials. The first step in researching curricula effectiveness is, of course, to document what curricula are used. Yet no states collect and publish information on math and ELA curricula purchases.[47] The same is true for the National Center for Education Statistics—despite its mandate as the "primary federal entity for collecting and analyzing data related to [American] education."[48]

CONCLUSION

This paper's findings suggest that New York City and New York State have taken Common Core implementation seriously; that implementation has generally proceeded smoothly, with the majority of NYC elementary and middle schools likely switching to DOE-recommended options; and that the majority of NYC principals are satisfied with their curricula choices, feel that their teachers faithfully implement such choices, and value the curricula guidance offered by city (Common Core Library) and state (EngageNY) websites.

However, with the exception of survey respondents, the author was unable to answer his primary research question: What math and ELA curricula do individual NYC elementary and middle schools use? While NYC collects data on its schools' curricula procurement choices, it remains in the dark on the extent to which such curricula are used in the city's classrooms.[49] Some organizations now offer guidance on curricula alignment with Common Core; but there is little empirical evidence on which curricula are better at improving student performance. The following initiatives would help remedy New York's current curricula information shortage:

1. **Collect data on curricula choices.** New York State already requires schools to complete an annual survey—the results of which the state makes public on its website, via school report cards. Likewise, NYC collects reams of data from city schools. Adding curricula-related questions to such data collection efforts could be done at little additional cost.
2. **Hire an analytical research firm to review curricula.** What curricula are most effective? Few have been subjected to rigorous, empirical tests. Indeed, simply establishing a correlation between curricula and student achievement would be a great step forward.
3. **Mandate that schools post curricula choices on their websites.** Parents deserve to know—and should not have to jump through hoops to find out.
4. **Encourage education charities to finance such efforts.** Major philanthropic organizations, such as the Bill and Melinda Gates Foundation, that have invested heavily in Common Core should support both curricula information collection efforts and empirical research on the relative effectiveness of various curricula.

Appendix

The online survey, below, was e-mailed to NYC's 1,168 elementary and middle school principals in early 2015.

1. What is your name? (Note: We intend to publish a list of schools and the curriculum they are using; all other information or answers you provide will remain strictly confidential.)

2. What is the name of your school? (Note: We intend to publish a list of schools and the curriculum they are using; all other information or answers you provide will remain strictly confidential.)

3. Please select the name of the ELA curriculum your school is using in the 2014–15 academic year. If a grade band does not apply to your school, please select N/A. If you are using more than one curriculum in a grade band, select all that apply.

	K-2	3-5	6-8
Code X (Scholastic)	☐ Code X (Scholastic) K-2	☐ Code X (Scholastic) 3-5	☐ Code X (Scholastic) 6-8
Core Knowledge Language Arts/Amplify (NYSED)	☐ Core Knowledge Language Arts/Amplify (NYSED) K-2	☐ Core Knowledge Language Arts/Amplify (NYSED) 3-5	☐ Core Knowledge Language Arts/Amplify (NYSED) 6-8
Expeditionary Learning (NYSED)	☐ Expeditionary Learning (NYSED) K-2	☐ Expeditionary Learning (NYSED) 3-5	☐ Expeditionary Learning (NYSED) 6-8
ReadyGen (Pearson)	☐ ReadyGen (Pearson) K-2	☐ ReadyGen (Pearson) 3-5	☐ ReadyGen (Pearson) 6-8
Reading and Writing Workshop (Teachers College)	☐ Reading and Writing Workshop (Teachers College) K-2	☐ Reading and Writing Workshop (Teachers College) 3-5	☐ Reading and Writing Workshop (Teachers College) 6-8
Success For All	☐ Success For All K-2	☐ Success For All 3-5	☐ Success For All 6-8
N/A	☐ N/A K-2	☐ N/A 3-5	☐ N/A 6-8
Other (please specify)			

4. Please select the grade bands for which you changed to a new ELA curriculum this year (2014–15) or last year (2013–14).

☐ No changes	☐ 3–5
☐ K–2	☐ 6–8

5. Please select the name of the math curriculum your school is using in the 2014–15 academic year. If a grade band does not apply to your school, please select N/A. If you are using more than one curriculum in a grade band, select all that apply.

	K-2	3-5	6-8
Connected Math (Pearson)	☐ Connected Math (Pearson) K-2	☐ Connected Math (Pearson) 3-5	☐ Connected Math (Pearson) 6-8
Impact Math (Glencoe/McGraw Hill)	☐ Impact Math (Glencoe/McGraw Hill) K-2	☐ Impact Math (Glencoe/McGraw Hill) 3-5	☐ Impact Math (Glencoe/McGraw Hill) 6-8
Go Math! (Houghton Mifflin Harcourt)	☐ Go Math! (Houghton Mifflin Harcourt) K-2	☐ Go Math! (Houghton Mifflin Harcourt) 3-5	☐ Go Math! (Houghton Mifflin Harcourt) 6-8
Eureka Math	☐ Eureka Math K-2	☐ Eureka Math 3-5	☐ Eureka Math 6-8
Everyday Math (University of Chicago)	☐ Everyday Math (University of Chicago) K-2	☐ Everyday Math (University of Chicago) 3-5	☐ Everyday Math (University of Chicago) 6-8
Math in Focus (Houghton Mifflin Harcourt)	☐ Math in Focus (Houghton Mifflin Harcourt) K-2	☐ Math in Focus (Houghton Mifflin Harcourt) 3-5	☐ Math in Focus (Houghton Mifflin Harcourt) 6-8
Singapore Math	☐ Singapore Math K-2	☐ Singapore Math 3-5	☐ Singapore Math 6-8
Investigations (TERC)	☐ Investigations (TERC) K-2	☐ Investigations (TERC) 3-5	☐ Investigations (TERC) 6-8
N/A	☐ N/A K-2	☐ N/A 3-5	☐ N/A 6-8
Other (please specify)			

6. Please select the grade bands for which you changed to a new math curriculum this year (2014–15) or last year (2013–14).

☐ No changes	☐ 3–5
☐ K–2	☐ 6–8

7. As far as you know, how closely do your school's teachers follow the ELA curricula materials?

☐ Very closely	☐ Not too closely	☐ Not sure
☐ Somewhat closely	☐ Not too closely at all	

8. How satisfied are you with your current ELA curriculum/a?

☐ Very satisfied	☐ Neither satisfied nor dissatisfied	☐ Very dissatisfied
☐ Satisfied	☐ Dissatisfied	

9. As far as you know, how closely do your school's teachers follow the math curricula materials?

☐ Very closely	☐ Not too closely	☐ Not sure
☐ Somewhat closely	☐ Not too closely at all	

10. How satisfied are you with your current math curriculum/a?

☐ Very satisfied	☐ Neither satisfied nor dissatisfied	☐ Very dissatisfied
☐ Satisfied	☐ Dissatisfied	

11. About how often do you think your teachers use the EngageNY website?

☐ Never	☐ Sometimes	☐ Often
☐ Rarely	☐ Regularly	

12. About how often do you think your teachers use the Common Core Library website?

☐ Never	☐ Sometimes	☐ Often
☐ Rarely	☐ Regularly	

13. Is there any detailed information about your math or English curriculum on your school's website (name of curricula, etc.)?

☐ Yes
☐ No

14. We would love to hear your thoughts and suggestions based on your experiences implementing Common Core in your school. Your responses are confidential. Thank you for taking the time to share them.

Endnotes

1. M. M. Chingos and G. J. Whitehurst, "Choosing Blindly: Instructional Materials, Teacher Effectiveness, and the Common Core," Brown Center on Education Policy at Brookings, April 2012, http://www.brookings.edu/~/media/research/files/reports/2012/4/10%20curriculum%20chingos%20whitehurst/0410_curriculum_chingos_whitehurst.pdf.
2. See Appendix.
3. This figure is for the 2014–15 school year and does not include NYC charter or District 75 schools (the latter exclusively serve students with special needs). Of the aforementioned 1,168 schools, 594 serve grades K–5, 360 serve grades 6–8, 158 serve grades K–8, 33 serve grades K–2, 12 serve grades 3–5, eight serve grades 3–8, and three serve grades K–2 and 6–8.
4. Elizabeth A. Harris and Ford Fessenden, " 'Opt-Out' Becomes Anti-Test Rallying Cry in New York State," *New York Times*, May 20, 2015, http://www.nytimes.com/2015/05/21/nyregion/opt-out-movement-against-common-core-testing-grows-in-new-york-state.html.
5. Chingos and Whitehurst, "Choosing Blindly."
6. Ibid.
7. For the purposes of this paper, "curriculum" is defined as a course of study. Extensive research suggests that a good curriculum contains well-defined, high-quality, content-rich, sequential materials for students and teachers, including textbooks, workbooks, teacher guides, instructional software, web-based content, homework, projects, quizzes, and tests.
8. The CCSS in math and ELA are available online. They provide benchmarks for what students should know at each grade level. Another new resource for parents are the "Milestones" videos, which show what grade-level work looks like in K–5 (grades 6–12 forthcoming). See GreatSchools.org.
9. See http://www.corestandards.org/ELA-Literacy/introduction/key-design-consideration.
10. See Acknowledgments section.
11. NYC DOE. This paper does not discuss curricula for NYC high school (grades 9–12) students, for whom there is a wider range of curricula options, as well as less formal guidance from NYC and New York State.
12. See http://educationnext.org/new-york-citys-education-battles.
13. James Traub, "New York's New Approach," *New York Times*, August 3, 2003, http://www.nytimes.com/2003/08/03/education/new-york-s-new-approach.html.
14. See http://educationnext.org/new-york-citys-education-battles.
15. See http://schools.nyc.gov/NR/rdonlyres/102DCC35-7F3E-4159-B093-9018D537782C/0/2013NAEPReleaseDeck8714.pdf.
16. The study was imperfect because Core Knowledge students received a targeted intervention while the other schools did not. Nevertheless, it provides clear evidence that a well-defined curriculum, taught by properly trained teachers, can have an enormous positive impact. See http://www.coreknowledge.org/language-arts-program-pilot.
17. See http://edexcellence.net/articles/engagenys-ela-curriculum-is-uncommonly-engaging.
18. See http://ny.chalkbeat.org/2012/06/07/expansion-of-common-core-fellows-teacher-program-is-planned/#.VWZXO-J3D_cs.
19. See http://schools.nyc.gov/Offices/mediarelations/NewsandSpeeches/2012-2013/new_curriculum_rigorous.htm.
20. The NYC DOE stated that these could be used alone or paired with Fundations, another phonics-based program.
21. Although the volume of responses was disappointing, they offer fairly representative samples, geographically (Brooklyn–19 schools, Queens–15, Manhattan–14, Bronx–10, Staten Island–7) and in student achievement (on the 2012–13 city report cards, 23 schools received a C, 21 a B, 13 an A, 3 a D, 2 an F, and 3 did not receive grades).
22. Grade "bands" represent grades K–2, 3–5, and 6–8. Principals were allowed to select more than one curriculum per grade band—curriculum mentions thus outnumber schools, and percentages do not always total one hundred.
23. NYC's DOE notes that procurement data only reveal what schools ordered, not necessarily what was used in classrooms.

24. See Acknowledgments section.
25. Schools that received low grades on NYC's progress reports and/or had low percentages of students scoring proficient on state exams.
26. See http://schools.nyc.gov/Offices/DCP/Publications/nystlananswers.htm.
27. Formerly Common Core but not affiliated with the Common Core State Standards initiative.
28. In this paper's focus group, a number of principals professed skepticism that posting such information was worth the effort—parents, they argued, typically show little interest. Better to share curricula information with parents who inquire directly, they added.
29. Elizabeth Haydel and Sheila Byrd Carmichael, "Uncommonly Engaging? A Review of the EngageNY English Language Arts Common Core Curriculum," Thomas B. Fordham Institute, May 2015, http://edexcellence.net/publications/uncommonly-engaging-a-review-of-the-engageny-english-language-arts-common-core.
30. NYS DOE.
31. Ibid.
32. See websites of the Association of American Publishers and the State Instructional Materials Review Association: http://publishers.org/schooladoption; and http://simra.us/wp.
33. Catherine Gewertz, "States Ceding Power over Classroom Materials," *Education Week*, February 18, 2015, http://www.edweek.org/ew/articles/2015/02/18/states-ceding-power-over-classroom-materials.html?preview=1&r=1460950011.
34. Specifically, the curriculum is Core Knowledge's Skills program, which uses systematic phonics instruction. Louisiana is now in the middle of its 2014–15 curricula review. See http://www.louisianabelieves.com/resources/library/curricular-resources.
35. Benjamin Herold and Michele Molnar, "Research Questions Common-Core Claims by Publishers," *Education Week*, March 5, 2014, http://www.edweek.org/ew/articles/2014/03/05/23textbooks_ep.h33.html.
36. Morgan Polikoff, "How Well Aligned Are Textbooks to the Common Core Standards in Mathematics?," in press, *American Educational Research Journal*, https://rossier.usc.edu/polikoff-study-finds-textbooks-not-aligned-to-common-core-standards.
37. To help boost Common Core alignment, AFT and NEA have partnerships with, respectively, lesson-sharing websites sharemylesson.org and betterlesson.org.
38. A second curriculum, My Math, met alignment criteria for grades 4–5. EdReports also plans to issue a report on K–8 ELA materials later this year. "Math Programs: How They Rate on Common-Core Alignment," *Education Week*, March 14, 2015, http://www.edweek.org/ew/section/multimedia/math-programs-how-they-rate-on-common-core.html.
39. Liana Heitin, "Most Math Curricula Found to Be Out of Sync with Common Core," *Education Week*, March 4, 2015, http://www.edweek.org/ew/articles/2015/03/04/most-math-curricula-found-to-be-out.html.
40. Liana Heitin, "Review of Math Programs Comes Under Fire," *Education Week*, March 18, 2015, http://www.edweek.org/ew/articles/2015/03/18/review-of-math-programs-comes-under-fire.html.
41. Chingos and Whitehurst, "Choosing Blindly."
42. See http://www.mathematica-mpr.com/news/after-two-years-three-widely-used-elementary-math-curricula-outperform-a-fourth.
43. Koedel even discovered variability in effectiveness across different subtopics *within* the same curricula: "Is Curriculum Quality Uniform? Evidence from Florida" (with R. Bhatt and D. Lehmann), *Economics of Education Review* (2013), https://economics.missouri.edu/working-papers/2012/WP1206_koedel.pdf.
44. Rachana Bhatt and Cory Koedel, "Large-Scale Evaluations of Curricular Effectiveness: The Case of Elementary Mathematics in Indiana," January 2012, https://economics.missouri.edu/working-papers/2011/WP1122_koedel.pdf.

45. Vanessa Coca et al., "Working to My Potential: The Postsecondary Experiences of CPS Students in the International Baccalaureate Diploma Programme," March 2012, https://ccsr.uchicago.edu/publications/working-my-potential-post-secondary-experiences-cps-students-international-baccalaureate.
46. Several empirical studies are forthcoming. Morgan Polikoff is currently analyzing textbook adoption data from the five most populous states: California, Florida, Illinois, New York, and Texas. He and Cory Koedel are also working to produce a curricula database for California schools in math, science, and ELA. David Grissmer and Thomas White of the University of Virginia's Curry School of Education will soon release the findings of a six-year study evaluating the effectiveness of the Core Knowledge curriculum in 18 Colorado charter elementary schools.
47. Indiana and Florida used to collect and publish them but recently stopped.
48. See https://nces.ed.gov/about.
49. Author's conversations with NYC DOE officials. Encouragingly, the NYC DOE is working to improve its quality-review process, which city schools undergo every few years, with curricula one of ten main indicators and reviewers checking to "ensure engaging, rigorous, and coherent curricula in all subjects, accessible for a variety of learners, and aligned to Common Core Learning Standards and/or content standards." See http://schools.nyc.gov/NR/rdonlyres/8C11A001-7E78-469D-996F-B0C3703CEA81/0/QualityReviewRubric1415.pdf.

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