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High Stakes Accountability in Urban Elementary Schools: Challenging or Reproducing Inequality?¹

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Abstract

In this paper, the authors use data from interviews and observations in four urban elementary schools – two high and two low performing – to examine how schools respond to high stakes accountability policies. The authors argue that school responses to high stakes accountability depend on school context. In low-performing schools, responses focus narrowly on complying with policy demands, focusing on improving the performance of certain students, within benchmark grades, and in certain subject areas. In contrast, higher performing schools emphasize enhancing the performance of all students regardless of grade level and across all subject areas. Given the concentration of poor students and students of color in the lowest performing schools, the authors conclude that issues of educational equity need to be given careful consideration in the implementation of high stakes accountability policies.

One of the most consistent findings in educational research is that family background is linked to children's educational outcomes, attainment, and adult occupational status (Blau and Duncan, 1967; Coleman et al., 1966; Jencks et al., 1972; Orfield, 1993). While education is viewed by many as an important mechanism for social mobility – tied to the "common school" belief that all children should have equal educational access and opportunity (Cremin, 1951; Muller and Schiller, 2000) – many scholars argue that schools reproduce social inequality. Over the past decade, policy makers have mobilized an arsenal of policy instruments in an effort to ensure that all children receive high quality education. One increasingly popular but controversial strategy relies on external accountability mechanisms, including high stakes testing, to transform instructional practices and make teachers and students more accountable for their performance. Critics argue that these policies will exacerbate inequalities by leading teachers to marginalize low-performing students (Clotfelter and Ladd, 1996; McDill, Natriello, and Pallas, 1986) and causing teachers to teach these students only the material covered on standardized tests. Others contend that such policies are misguided because limited resources, unprepared teachers, and ineffective instructional practices rather than incentives are the problem that needs to be addressed (Darling-Hammond, 1994).

Proponents argue that such assessments will reduce gatekeeping processes such as tracking and low teacher expectations that disadvantage certain students. External assessments, it is argued, provide objective information for school-based decisionmaking and therefore work against more subjective judgements that contribute to stratification (Muller and Schiller, 2000; Coleman, 1997). For example, supporters argue that teachers' assessments of students' ability as well as decisions about course placement and grouping arrangements inside classrooms could be based on more objective information from standardized tests (Muller and Schiller, 2000).

Given the increasing emphasis on external assessment and accountability, and the strong arguments on both sides of the issue, it is interesting that with a few notable exceptions (Muller and Schiller, 2000; Roderick, Bryk, Jacob et al., 1999) research on how these policies unfold in schools and the *mechanisms* through which they impact student learning has been limited. Moreover, few studies have explored how the implementation of these policies may be situated in certain school contexts and how this may influence their impact on students.

The study that is reported in this paper examines the implementation of highstakes testing in high and low performing schools. We seek answers to two related questions. First, is high stakes accountability policy perceived and implemented differently in high and low-performing schools? Second, does the implementation of high stakes testing in these schools suggest that it will reduce social stratification through the mechanisms outlined by testing proponents?

High Stakes Accountability and Stratification

One aim of accountability policies is to insure that all students receive high quality instruction and reach a certain level of competence in core subject areas (Muller and Schiller, 2000). Some districts, like Chicago, have adopted a high stakes version of these policies that link student performance on examinations to consequences for schools and, in some instances, students themselves. Opponents of these policies argue that for these approaches to be fair, instructional changes should precede consequences for students (Heubert and Hauser, 1999) and that such policies create incentives for marginalizing low performing students (Clotfelter and Ladd, 1996; McDill, Natriello, and Pallas, 1986). Neutral observers caution that those implementing such policies must insure the adequacy of educational resources for the tested students, attend to the reliability and validity of the exams for their intended purposes, and avoid basing decisions on one test (AERA 2000).

Proponents of these policies suggest that they can reduce inequality through increasing student motivation, creating incentives for teachers to seek improvements in student outcomes, providing more objective information about students' performance for school based decision-making, and increasing academic press in schools – particularly those serving low-income and minority students (Coleman, 1997; Shouse, 1997; Muller and Schiller, 2000).

Coleman (1997) advocates the development of output-driven schools, a key component of which would be external assessment and accountability. He argues that external assessments such as student performance tests would create new incentives for school improvement, providing objective information for teachers to assess students and make course placement decisions, thereby reducing the gatekeeping functions of schools (Coleman, 1997; Muller and Schiller, 2000). Shouse (1997) argues that designing more output-driven schools would also increase academic press and have particularly beneficial consequences for students with lower socioeconomic status. Therefore, proponents of these policies suggest that three key mechanisms – the creation of new incentives, the provision of objective information for school decision making, and the increase of academic press – will combine to reduce schools' and teachers' gatekeeping practices and contribute to a reduction in stratification.

While arguments have been forwarded in support of and in opposition to these policies, surprisingly little research closely examines how they play out in schools. The data on outcomes that does exist presents a mixed picture. Data on the implementation of high stakes testing in Chicago suggests that the percentage of students meeting minimum competency requirements has increased since the introduction of the policy (Roderick et al., 1999). However, the policy has differential impacts on students based on their family background characteristics. For example, African American students were retained at a much higher rate than their white and Latino/a counterparts because they tend to score

lower than whites and because of the higher proportion of Latino/a students who are in bilingual programs and therefore exempt from the policy (Roderick et al., 1999). This likely has a stratifying effect for African American students because grade retention may be associated with negative long-term outcomes including reduction in self-esteem and increased likelihood of high school drop-out (Roderick, 1994).

Muller and Schiller (2000) examine how state-level testing policy impacts high school students' graduation rates and mathematics course-taking. They show that these policies equalized students' academic attainment and reduced the impact of teachers' gatekeeping through low-expectations, seeming to support the arguments of supporters of these policies (Muller and Schiller, 2000: 210). However, they also find that when state tests link students' performance to consequences for schools it leads to stratification based on SES, lending support to the arguments of opponents of testing policies. Therefore, their findings do not strongly support the arguments of proponents of these policies or their critics. They recommend more research using both qualitative and quantitative methods to explore the mechanisms through which these policies influence teachers' practices and students' outcomes. Research into the *processes* of accountability policy implementation will help inform this discussion.

In this paper, we argue that in order to understand the implications of these policies it is important to examine how they are understood and implemented in particular school contexts. In the current paper, we examine schools' responses to high stakes accountability policy, paying particular attention to the implications of these responses for issues of educational equity both within and across institutions. More specifically, we examine how teachers and administrators in high and low performing schools respond to high-stakes accountability policy focusing on their responses to incentive structures, their interpretation and use of test score data, and their subsequent instructional priorities. We argue that these responses to high stakes accountability are

situated in a school's status with regard to accountability policy – probation versus high performance – and argue that school status is correlated with students' race and social class. We conclude that differences in responses to accountability policy in different types of schools may increase rather than reduce educational stratification.

The paper is organized as follows. First, we outline the theoretical tools used to frame our discussion. Following this, we discuss the methodological approach that guided the research. We then examine differences in schools' responses to high stakes accountability in four elementary schools – two high performing schools¹ and two probation schools. In the final section we discuss these cases, paying particular attention to the implications of school-level responses to high stakes testing for issues of stratification. We argue that the picture emerging from these cases suggests that the ways in which these policies are implemented in particular school context may exacerbate rather than reduce educational stratification.

Theoretical Tools

Research on the role of family background and educational stratification demonstrates consistent links between socioeconomic status and students' outcomes. Some explanations for this pattern focus on direct effects of family background such as class-based disparities in parents' beliefs and involvement patterns (Lareau, 1989; Sewell and Shah, 1968 (a), Sewell and Shah, 1968 (b); Sewell and Hauser, 1980), family structure (i.e. number of parents in the home or the number of siblings in the family), and access to extra-familial resources through parents' social networks and institutional affiliations (Coleman, 1988; Coleman and Hoffer, 1987; Wong, 1998; Carbonaro, 1998; Hao and Bonstead-Bruns, 1998; Hofferth et al., 1998; McNeal, 1999; Wilson, 1987). Other scholars focus on the interaction between these background characteristics and school practices. In these accounts, schools impact students though micro-political processes such as low teacher expectations (Roscigno, 1998; Brophy and Good, 1973;

Rist, 1970, 1977; Rosenthal and Jacobson, 1968), tracking (Oakes, 1995), and cultural reproduction processes (Bourdieu, 1979; Bourdieu and Passeron, 1977).

A third approach – institutional stratification– highlights the implications of interorganizational processes for social stratification (Roscigno, 2000). Because race and social class shape school attendance patterns and contribute to the creation of highly segregated school contexts (Orfield, Bachmeier, James, and Eitle, 1997), family background can contribute to stratification through the distinctly different characteristics of the schools students attend (Roscigno, 2000). Differences in schools' monetary resources (Elliot, 1998; Greenwald, Hedges, and Laine, 1994; Hedges and Greenwald, 1996; Kozol, 1991), instructional quality (Smith, Lee, & Newman, 2001), presentation of valued knowledge (Anyon, 1991) course offerings (Ayalon, 1994), and social organization (Bowles and Gintis, 1976), all contribute to the maintenance of social stratification.

Roscigno's institutional stratification perspective captures these interorganizational dynamics, emphasizing the "multi-level and inter-institutional nature of racial educational disadvantage" (Roscigno, 2000:271). Roscigno writes:

Arguably, the most important of these inter-institutional linkages in relation to race/class reproduction in education has to do with family background inequalities and their consequences for achievement *through* the character and resources of the schools one attends. What this means, more straightforwardly, is that family background shapes residential options. Where one resides, in turn, has a large impact on the school one attends and, consequently, achievement [emphasis in original] (Roscigno, 2000:271).

He concludes that residential segregation leads to indirect effects of family background through enrollment patterns in public versus private schools, the race and social class composition of schools, monetary expenditures, and school climate (Roscigno, 2000).

Other work demonstrates that the concentration of low-income and African American students in certain schools may have detrimental implications for student outcomes apart from the individual characteristics of students (Bankston and Caldas, 1996). Taken together, this work demonstrates that educational stratification based on race and social class is at least partially maintained through race and class-linked institutional processes.

Building on this work, we argue that the implications of policies like high stakes accountability are also shaped by institutional stratification processes. In contemporary urban contexts there are several types of schools including private schools (both religious and non-religious) which are often thought to be the highest quality, magnet schools which are often considered the "elite" public schools, and neighborhood schools which can be further divided into high and low quality categories. Social class and race are important in patterning the schools that children attend, with the more highly valued settings being most accessible to middle- and upper-class children. The different types of public schools are likely to implement the policy differently. Therefore, if students are concentrated in different types of schools based on race and social class, they will be impacted by the policy in distinct ways.

Taking the Chicago Public Schools as an example, data² shows that schools on academic probation have a higher percentage of African American and low-income students, on average, than the typical Chicago Public School. African Americans make up 52% of the district's student population but 83% of students attending probation schools. Likewise the district average of low-income students is 84% while the average for probation schools has 92% low-income students. Perhaps most interesting, however, is the fact that while white students make up 10% of the district student population, they make up less than 1% of the students attending elementary schools on probation.

These figures are more striking when compared to data from Chicago magnet schools which consistently rank among the district's highest performing schools.

Elementary magnet schools contain 55% low-income students (compared to 92% for probation schools) and 53% Black students (compared to 83% for probation schools). White students make up 17% of elementary magnet school students (as compared to less than 1% in probation schools).³ These data demonstrate that structural processes related to family background shape students' access to schools of different quality. African American and low-income students are more likely to be found in the lowest performing schools while white and middle income students are more likely to be found in higher performing magnet schools.⁴ Table 1 presents the mean percentage of students by race (black/white) and social class in the Chicago district as a whole as well as its magnet, high performing, and probation elementary schools.

[insert table 1 here]

The multiple factors that contribute to this process are beyond the scope of this paper, however, as we shall see, the observed patterns likely have important consequences for students' educational experiences.⁵ In the discussion that follows, we focus on school status in relation to high stakes accountability – probation versus high performance – as an important factor that shapes schools' responses to accountability policy and students' access to educational equity.

Research Methodology

This paper is based on data from the Distributed Leadership Project, a four-year longitudinal study of elementary school leadership funded by the National Science Foundation and the Spencer Foundation. The project began with a six-month pilot phase during the Winter and Spring of 1999 involving seven Chicago elementary schools, four interview only sites and three schools where we conducted interviews and extensive fieldwork. The first full year of data collection (Phase 1) began in September 1999 and focused on eight Chicago elementary schools, two of which were also part of the study's

pilot phase. Year 01 data collection was completed in June 2000, and involved between 50 and 70 days of fieldwork in each of our eight sites. The four schools that are the focus of this paper were selected because two were the highest performing in our sample and the other two were probation schools and the lowest performing.

Site Selection. We used a theoretical sampling strategy (Strauss 1987; Glaser & Strauss, 1967) to select study schools based on two primary dimensions. First, the schools vary in terms of student demographics, including seven schools that are predominantly African American, three that are predominantly Hispanic, and three that are mixed. Second, while we are chiefly interested in schools that had shown signs of improving mathematics, science, or literacy instruction (in terms of either process or outcome measures), we also wanted to study some schools that had managed little change in student outcome gains. We focus our analysis in this discussion on two high performing schools and two schools that are on academic probation. In table 2 we outline schools by racial composition and percentage of low-income students.

[insert table 2 here]

Data Collection. Research methodologies include observations and structured and semi-structured interviews. In the schools reported on in this paper, researchers observed school leadership events, meetings, and classroom instruction in grades 2 and 5 and conducted interviews with teachers and school leaders. During Phase 1 of the study, researchers spent the equivalent of three to four days per week per school over a tenweek period in the Fall of 1999 and a 12 week period in the Spring of 2000. Leadership events observed in these schools to date included grade level meetings, faculty meetings, school improvement planning meetings, professional development workshops, and supervisions of teaching practice. In addition, we observed a number of other events including homeroom conversations between teachers, lunchroom conversations, grade level meetings and subject specific workshops and meetings.

We completed interviews with teachers at the second and fifth grade levels and school leaders (including lead teachers). Interview protocols focused on school leaders' agenda and goals, their responsibilities, and the key tasks they perform as part of promoting instructional change in mathematics, science and literacy.⁶ We also selected specific instances of school leaders' practices to observe and then conducted post-observation interviews with these leaders about the observed practice.⁷

Using the protocols, researchers wrote detailed fieldnotes following each observation. A total of 181 sets of fieldnotes detailing anything from 30 minute meeting observations to three hour professional development workshops were compiled thus far. All interviews were tape-recorded and transcribed.

Data Analysis. Data collection and data analysis are closely integrated, allowing us to examine patterns and working hypotheses as they emerged from data analysis and refine data collection strategies (Miles & Huberman, 1984). Coding categories were developed based on the distributed leadership theoretical framework and initial analyses of our observation and interview data. A commercial computer based qualitative coding program – NUDIST - was used to code all project data. NUDIST allowed us to code the emerging ideas and concepts from the data into free nodes that can be compared and related to each other, forming larger "parent" nodes that can be stored in an index system that brings the different components of the project together. Coders worked together to code transcripts initially in order to develop a shared understanding of what each code meant. Once coders had developed a "taken as shared" understanding of these codes, they worked independently. We also used our field notes (which document the actual observed practice of leadership) and interviews to construct our case studies for this paper.

High Stakes Accountability: The Case of the Chicago Public Schools

A popular public policy strategy in recent efforts to improve America's schools involves holding school's accountable for student achievement. Arguing for a K-12 curriculum that is grounded in more intellectually rigorous content, reformers propose to use a variety of policy levers to hold schools accountable for students' mastery of this content. These policy efforts involve at least two components: specific student performance outcomes and rewards and sanctions for schools (Clotfelter & Ladd, 1996; Elmore, Abelmann, & Fuhrman, 1996). We identify each of these components below and use the Chicago Public School's accountability policy, an often referred to example of a successful accountability policy in both policy and academic circles, to illuminate each component.

To begin with, student performance outcomes as measured by tests, rather than inputs (e.g., number of certified staff), are the primary mechanism that state and local government agencies use to hold school's accountable. While the 1988 Chicago School Reform Act (P.A. 85-1418) included the decentralization of decision making to the school site level and the formation of Local School Councils (LSC), the Chicago School Reform Amendatory Act of 1995 gave much authority to the chief executive officer, appointed by the mayor, who was able to place poorly performing schools in remediation or on probation based on their performance on the Iowa Test of Basic Skills (ITBS). Specifically, student performance on the ITBS at benchmark grades became the districts' primary measure of school accountability and progress.

The second component of most accountability measures involve the creation of a system of rewards and sanctions as well as intervention strategies designed to motivate schools to improve student achievement. In Chicago Public Schools the key sanction is the power of the Chief Executive Officer to place schools on probation because of low performance as measured by standardized test scores. For example, in 1996 the CEO

placed twenty per cent of the elementary schools, 109 schools, on probation because fewer than 15% of their students performed at or above national norms on the reading and mathematics sections of the Iowa Test of Basic Skills (ITBS) (Hess, 2000; Wong & Anagnostopoulos, 1998).⁸ Schools on probation are required to develop a supplemental school improvement plan that outlines specific strategies the school will take to improve student achievement and defines criteria that will be used to judge the school's progress toward improvement. For technical assistance, schools use their discretionary funds to purchase the services of an external partner whom they can select from a districtapproved list. If the district decides that a school has not made adequate progress, the CEO can have the school reconstituted, ordering new LSC elections and replacing the principal and faculty.

Some efforts to transform accountability arrangements also include rewards or sanctions for students. This is important because, as some scholars note, teaching is coproduced by teachers <u>and</u> students (Cohen and Ball 1996). Hence, an accountability system that targets teachers and school administrators exclusively may place them in an impossible position as they depend on their students to improve school performance. In 1996 the school district also ended social promotion, informing the students that beginning with the 1996-97 school year if they failed to achieve at a certain level on the ITBS they would have to attend summer school. Further, if by the end of the summer students still fail to achieve at the required level on the ITBS they are not promoted to the next grade level. These developments are important because the incentive structure mobilized by the school district targets students in addition to teachers and administrators.

General Impacts of High Stakes Testing

One of the core arguments of proponents of high stakes testing is that it provides incentives for school improvement. In simple terms, when schools, teachers, and students are made accountable for students' outcomes, it is argued, they will seek to improve them. Data from our schools indicate that school leaders do pay attention to high stakes accountability. There were general patterns that cut across all of the schools in our sample. Leaders at each school report paying some attention to the exams. Even in the highest performing schools, schools where 50% or more of the students score at or above national norms in core subject areas, school leaders report paying some attention to exam results. In addition, leaders at both high and low-performing schools reported seeking improvements in students' outcomes. As the principal at one of the higher performing schools reported:

When I look at the test results – and I happen to be one that believes that the test results do tell you something about curriculum –Fifty percent are succeeding. I look at it the other way, fifty percent of our children are not succeeding ... Hopefully our scores will go a notch up. You know, even one percent to show that there is some effort and some results.

The push for improvement was consistent among school leaders across all of our schools. None of the school leaders we interviewed was completely content with student performance.

All of the schools also engage in some form of explicit test preparation activities. There are differences, however, in the strategies used and the frequency of these activities. At one school, which engages in the most extensive test preparation, students are tested every Thursday. The stated goal at this school is to make the testing environment comfortable for the students so that when they take the actual exam they

will not be overwhelmed or feel undue pressure. As the Assistant Principal at this school explained:

We expose them to the testing situation at least once a week and we use the bubble forms except for the little ones because their test is not like that. In other words we try to simulate the testing even with the writing part of the test. I've shown the teachers how to do booklets that simulate the real test. So we try to do whatever we can so that our children are accustomed to taking tests so they're test smart kids and they're not nervous.

Another school used a five-week assessment to structure instructional activities for students and target specific problem areas. Finally at other schools these activities were more sporadic, occurring increasingly often just prior to the testing period.

We also found that testing structured schools' and teachers' priorities with regard to the content covered in classrooms and the attention paid to different subject areas. With regard to instructional content teachers reported that testing was outmatched only by other teachers and textbooks as an influence on the content they covered.⁹ One specific manifestation of this influence on content coverage was the lack of attention to science instruction when compared to reading and mathematics. As a field, elementary education is characterized by the differential valuation of mathematics, science, and literacy instruction. Although most elementary teachers do not have a well-defined subject matter specialization and do not work in situations where organizational arrangements (e.g., departmental structures) directly support subject matter identities, subject matter is an important context for teachers' work (Stodolsky, 1988). A general pattern at our schools was that science instruction was given lower priority than other subject areas. Across our schools we found that when compared to mathematics and language arts instruction, science had fewer formal and informal subject matter leaders, less attention from school administrators, and fewer instructional specialists (Spillane,

Diamond, Walker et al. 2001). Further, our data suggest that accountability policy may accentuate this undervaluing of science education. When asked how important testing was on the content they covered in science, teachers ranked it below principals, other teachers, standards, textbooks, and instructional specialists. Teachers in both high and low-performing schools captured the situation:

So I go to my grade chairperson and she'll give me a list of the ten objectives in reading and math that I must teach. Science and social studies are more flexible because the students are not tested on the IOWA's [Iowa Test of Basic Skills] in science and social studies so that's more, you know, on the teacher's personal decision.

You know science isn't one of your guides for whether a child is promoted or graduates. So reading and math are what are stressed because those are what everybody looks at. And to a certain degree, that's what the teachers look at too. You know I've got to get you on. I've got to get you out of this building. You've got to get this in math, you've got to get this ... in reading. So those two always come first.

We aren't able to teach science as much as I would like to. Mainly because on the 3rd grade level we aren't tested on [science and social studies] we're not tested on those subjects we are tested on reading and math. ... I just can't fit it in. [There is] so much math and so much reading that it's hard to fit the science and social studies [in]. So most of the time ... I begin teaching science and social studies after the test.

Therefore, across all of our schools, and without regard to performance level, schools paid attention to tests results and sought to improve students' outcomes on them. According to teachers' reports, testing and accountability policy also influenced the instructional content covered and the priority placed on different subject matter areas, with science receiving less attention than reading and math. While general patterns existed across the schools, school personnel at high and low performing schools responded to these policies differently. The following section discusses some of these differences, comparing responses to accountability policy at high and low performing schools.

School Status and The Nature of Incentives

Proponents of high stakes accountability argue that it will create incentives for instructional improvement. We argue that how schools respond to these incentives depends at least in part on their status in relationship to accountability policy. In Chicago, the incentives for probation schools are clear and direct, they are organized around the threat of reconstitution. To avoid this schools must get off of probation and this becomes the goal. In high performing schools, the incentives are structured around rewards more than sanctions, with recognition for high performance likely being the primary motivator. The following section discusses the ways in which school leaders (and schools as a whole to a certain extent) at high and low performing schools orient themselves toward accountability policy and the ways in which the incentive structures seem to shape these orientations.

Incentives in Probation Schools

The two probation schools – Waxton and Field – emphasize getting off of probation. As Waxton School's principal stated when asked about the schools goals, "the obvious goal is to get off probation! Now that's it in a nutshell." This emphasis on getting off of probation in these two schools had an important impact on their responses to accountability policy. While probation status allows school leaders to demand teachers

attention, the need to respond to immediate pressures from external actors such as probation managers led to several related responses which tended to be cosmetic and superficial with regard to classroom instruction.

The principal at Waxton School used the accountability policy as a "stick" to get teachers' attention and motivate them. She was in her first year at the school and used accountability policy as a way to legitimize her push for teachers to improve. She reminded teachers that she would replace those who were not pulling their weight, suggesting that this was a "requirement" she would have to reluctantly enforce. In one staff meeting, for example, she told teachers about how she had been asked by the probation manager (and the central office) to begin the process of identifying teachers who might potentially be replaced. She explained to the teachers that, although she "could no longer ignore" these requests by the probation manager, she would drag the process along to give each one of them "a chance" to improve. This was a tone she consistently sounded, seeking to motivate teachers. In this sense, accountability policy (and the set of actors associated with it) serves as a threat, a way for school leaders to get the attention of teachers and push them to change their practices.

The external partner at Field School believes that teachers at this school are open to change. As she has observed at this school and at others "teachers in probation schools are more likely to be open [to change]. They know the next step is possibly reconstitution." Therefore, at both of the probation schools there is a sense that accountability policy can be use to motivate teachers to be responsive to the efforts of school leaders.

Another motivation strategy used at Waxton school was the pep-rally strategy. Here, leaders sought to encourage teacher effort by expressing their confidence in their abilities and promising that with hard work they could get off of probation. Consider the first meeting of Waxton's staff with the school's new probation manager:

There was clapping of hands as Beatrice stood up to speak. She began by saying "it is possible to get off probation" (another loud applause) and "you are going to get off probation." (another loud applause). Beatrice then gave a little talk about how she thinks the staff and children at Waxton are capable and can achieve. "Sometimes", she continued, "it's only a question of knowing what to focus on, getting children to be ready for the tests and getting the right tools."

There was an air of a revival meeting atmosphere in this meeting, the emphasis being liberation from the bondage of probation. This revival meeting approach was evident again at another meeting:

Beatrice quickly read off the next activities on her list (noting that they were running out of time) "Follow up in the classrooms after discussing each strategy," "test-taking – we will do breakdown of test skills, so you focus on the right skills that are asked in the tests" "We did this at [Maxwell] School and found it very helpful" ("yessess" from teachers and interjections of "that's what we need!"). Beatrice's colleague emphasized that Waxton will "get off probation" which was followed by applause.

In a certain sense this strategy dovetails well with the use of probation as a stick to motivate teachers. Being placed on probation is likely depressing. It labels the school as a failure and places it in jeopardy of being "reconstituted." In addition to this if school leaders work too hard to challenge teachers without some sense of emotional support, it is likely that it will be difficult to make change. This pep rally/revival meeting approach may be well suited for creating social support in the push for academic improvement.

At the probation schools, accountability policy, and particularly probation status, enhanced school leaders' ability to get teachers' attention. This is a potentially powerful tool in the effort to implement instructional change, a tool that proponents of high stakes accountability point to in support of these policies.

Managing the Impressions of External Actors

Another set of incentives that existed in probation schools but not high performing schools was the need to impress external observers. Probation schools must have an external partner and a probation manager. These actors play a role in determining whether or not a school gets off of probation. Some probation school efforts were designed to convince external observers that their schools were doing all they could to improve students outcomes. The pressure to do this was captured by the principal who relayed a conversation she had had from an office of accountability representative.

When Dr. Austin came out yesterday, he's ... from the office of accountability. He said, "You know there are schools that are in worse condition, physical condition than your school. Those schools are open because they are at 40 percentile." And he said, "We don't care if they run naked through the hallways but they're not on probation. Whatever it is that you need to do then that's what you will have to do to get your school off of probation. So there's still something wrong that has to be fixed ... So whatever it takes, you have to fix it."

At Field school, some of these responses emphasized superficial changes designed to impress district officials and probation managers. For example, since being placed on probation, Field school has adopted several programs in a rather haphazard way in an attempt to demonstrate improvement efforts. This approach has been unsuccessful in the eyes of one of the schools external partners, a consultant from a local university, who argued that the problems of the school result from a lack of coherence in their improvement efforts. Likewise, the following field note expresses a similar sense of the lack of coherence of the schools program.

After sitting through a number of ... meetings, I'm still struggling to see coherence to the schools struggle to get off probation. While the components seem to be in place ... the quality of those components seems to be lacking.
Schools adopting several disconnected programs have been characterized as "Christmas tree" schools. This pattern surfaced at many unsuccessful elementary schools
(Consortium 1993). In contrast, more recent work suggests that increasing instructional program coherence is an important mechanism for instructional improvement (Newman, Newman, Newman,

Smith, Allensworth, and Bryk 2001).

Another strategy was to impress external observers through emphasizing the *appearance* of student and teacher engagement in instructional activity and student discipline. For example, at a Field School staff meeting the assistant principal warned teachers that the school's probation manager would be visiting and advised teachers on what actions to take.

I don't know if you saw Ms. Fox, our probation manager, here in the building today. ... Make sure your university organizers are visible, there should be student work, your classroom should be attractive, they are going to be looking at the decorum of our students so make sure you continue with working on good behavior, most important they are looking for students on task and that teachers are effectively teaching their students...there is no telling when someone might be in to visit your class.

This reflects one of Field School's responses to external pressures. The emphasis here is on classroom management, décor, and the displaying of students work. The principal does discuss the importance of demonstrating being "on task" but focuses less on instruction issues and more on classroom management and appearance. In other words, this strategy is cosmetic, emphasizing the trappings of instructional improvement while the actual instructional practices are not emphasized.

Responses to high stakes accountability in the probation schools naturally emphasized getting off of probation. The strategies used by school leaders included using the school's probationary status to motivate teachers – both through the threat of negative consequences for low-performing teachers and through the promise of getting to the probation free "promised land" and efforts to manage the impressions of external stakeholders through adopting multiple programs and increasing the *appearance* of instructional emphasis and innovation.

Incentives in high performing schools

Incentives in the high performing schools are less clear than incentives at probation schools. One strategy used by school leaders in these schools revolved around praise for accomplishment. In Kelly School professional development meetings the principal regularly praised teachers for working hard to produce high student outcomes. Teachers were encouraged to applaud their own and other accomplishments and test results were prominently posted inside the school and shared with parents who visited the school. All of this reinforced pride in past accomplishments and encouraged continued improvement.

Given past success however, leaders were also forced to combat complacency on the part of faculty. In the case of Baxter, the principal felt that teachers believed that the school was performing better than it was. He used trend test-score data to challenge teachers assumptions. He demonstrated that while the schools absolute outcomes were excellent, when compared to other schools in their neighborhood their students were not gaining as much year to year. As he explained:

The analysis made clear that out of the 12 schools [in the neighborhood], Baxter was either at the bottom or really close to the bottom, in terms of the amount of actual growth that students were making. Forget about where the growth started,

forget about the base. Forget about the end. Just, you know, how many months of progress, on an average were sixth graders achieving.

School leaders used this data in school meetings to help create incentives for continued instructional improvement. They took great pains to repackage standardized test data in ways that captured teachers' attention, transforming massive spreadsheets into relatively easy to read charts that were color-coded by grade-level.

Likewise, at Kelly School, a monitoring system with a template that connects teachers daily lesson plans to the material tested, district standards, and the level of mastery of specific skills for each student was used to maintain a focus on constant improvement. The assistant principal explained how this skill chart works.

It's just an organizational tool. You look at this chart and you see that child didn't master that skill. That is something you can do in a small group. You can assign your [teacher's] aide to work with that particular child on that skill and retest, cause we believe right away if the child didn't master it ... most kids only miss it like a master is 80% maybe they got a 75 or a 72, so he just missed it by a little bit, quickly review, go over it again and retest. The child masters it then move him on.

At a professional development meeting the principal emphasized that teachers need to insure that they are tracking the skill mastery of students.

"I noticed that the skill charts are not being filled out diligently enough. The [university program] got us on the path to improvement through charting our progress but we can't get lax on this. We have completed 2 fifth week assessments and if you have a lot of children not getting their skills you need to re-teach. If a lot of your children are not getting the material it is not the children. It is something to do with the way you taught it. You can't teach the same way every year. Its always the children. People make excuses. But that does not hold

up because we can take the same child in two different classes and they can do well in one and have trouble in the other. But if you see students are having trouble don't go on. Its going to be evident that the students are not getting it so think of another way to teach it.

Here school leaders help create a school-based incentive structure tied to the maintenance of high performance. In this example, the teachers maintain primary responsibility for student performance and excuses based on students' limitations are discounted. In another meeting (the following week) she again emphasizes the need to maintain focus and work hard in order to keep test scores up.

[The principal] said that someone inquired about Kelly and asked if the school has gifted students. She said that "our students are average ... our instructional program is what makes the difference... the only way we continue to improve is through hard work. Just because we did well last year [on the ITBS] does not mean anything. We have to continue to work hard and align our lesson plans. In high performing schools leaders used praise for past performance and the need for constant improvement to heighten teachers' sense of accountability and motivate them.

In contrast to probation schools, the incentives in high performing schools were based more on rewards than sanctions. In these schools, school leaders praised school accomplishments in professional development meetings and proudly displayed students' outcomes in the school and communicated these to parents. In addition, because the accountability policy did not create sanctions for these schools, school leaders sought to interject other forms of motivation through comparisons with other schools or through building on the school's past performance.

Therefore the nature of the incentives created by high stakes accountability are different for high and low-performing schools. High performing schools are arguably in a

better position to focus on instructional improvement while probation schools must respond directly to external pressures while they seek to enhance students' outcomes.

Accountability Policy and "Objective" information

Proponents of accountability policy also argue that test results provide objective information upon which to orient school decision making. The argument is that schools with clear, objective information about student performance will be able to make better informed decisions about instructional improvement (Coleman 1997). Once again our data demonstrate distinct patterns in the interpretation and use of results in high performing versus probation schools. We argue that the ways in which test results are interpreted depends, at least in part, on the school context.

Interpretation and Use of Data at High Performing Schools

At both high performing schools, the full range of test score data was used to inform strategies of instructional improvement. At both schools, leaders use the outcomes for the entire school in addition to the item analysis to track overall school trends. For example, Baxter school's principal and a collection of school leaders¹⁰ are involved in data interpretation including longitudinal trend analysis and the analysis of movement between quartiles. During an initial meeting with the principal, he shared a longitudinal data analysis for both mathematics and reading which highlighted the movement of students between quartiles for the entire school and for specific grade levels. In addition, he reported on the development of a particular grade level, the class of 2003, in terms of their performance in mathematics and reading.

At both Kelly and Baxter school leaders use the item analysis to identify specific student needs within subject areas. For example, the Kelly principal explained how the item analysis allowed school leaders to identify overall student needs:

We try to look at [test scores] in August if we have them back and we design our program a lot looking at those skills that are measured on the ITBS [Iowa Test of Basic Skills] and what the item analysis¹¹ indicate our weaknesses and our strengths and so forth.

Kelly's principal explained how the school uses test scores to track student performance. When asked about how this information informed the instructional program in mathematics the principal explained.¹²

With the math I found that concepts, our children tend to do well in computation, pencil and paper, figuring out the problem, 2 + 2, whatever they do well but when it comes down to the concept and which _____ looking hopefully they're using – they needed to use higher order thinking skills they tend to not do as well and we're working – we started last year we started focusing in on higher order thinking skills because ______ moving more and more in that direction. The math problems they have to explain how they got the answers not just get the answer. So what we've been doing we have been working with this year a new initiative not all teachers are doing this but next year every teacher will be doing this. The math journal in which children they must explain – they must explain how it is that they arrived at the answer that they got and as I said the total math is not – it's pretty good cause we're at 61% but the math problem solving we tend to not do as well and especially in the area of math concepts. So we're working on that.

The principal's interpretation is enhanced through her interactions with others in the school who inform her interpretations and seek to implement instructional responses. The school's assistant principal, counselor, and technology coordinator all play active roles in data interpretation. The Technology coordinator identified similar interpretation of the test score data.

The biggest deficit in mathematics grade-wise, and we found it to be pretty much the same in every grade, was the word problems. Them interpreting word problems. Their computation skills are great. Just about in every grade. The computation scores were good, average or above average. Data interpretation was another area that we felt needed some work.

Baxter made similar use of the test score data. As the principal at this school explained: One thing that helped us a lot in terms of being able to disaggregate our math data is we were able to disaggregate it into three sections called problem solving and data interpretation, concepts and estimation, and computation.

Therefore, both of the high performing schools used test results to identify macro-trends across the school and focus attention on areas of specific needs. In both schools, the "item analysis" was a tool that helped them identify where they should focus their attention.

Interpretation and Use of Data in Probation Schools

At the probation schools the interpretation and use of the data was more general. School leaders discussed the need to improve reading and mathematics but did not speak in specific terms as they did in the high performing schools. There was limited discussion of sub-dimensions of subject matter areas, rather the discussion revolved around reaching the probation threshold in the two primary subject areas. In addition, the data was used at these schools in pretty much the form in which it came from the district. There was less re-packaging of the information and limited analysis of specific tends (with the exception of the identification of specific students who were close to "passing" the exam).

The high performing schools use the test score data in ways that seem consistent with the arguments of testing proponents. The test results are used to define students' specific instructional needs and provide a basis for school level instructional decision

making. In contrast, the probation schools tend to focus more on the overall test results and have a less systematic strategy for turning test results into useful information for instructional change. This suggests that even the interpretation of "objective" data is situated. Within higher performing schools, there is a more substantive interpretation of the data. It suggests that the resources for data interpretation are greater in higher performing schools. Therefore these schools are more likely to benefit from the information in ways that lead to instructional improvement.¹³

Accountability Policy and Academic Press

Academic press measures the normative emphasis on academic success and reaching certain standards of achievement among both teachers and students (Lee, Smith, Perry, and Smylie 1999). We argue that instructional focus is likely to increase in these schools with high-stakes accountability. Schools will focus on academics more when the incentives structure shifts, with rewards and sanctions being tied to students performance. However, academic press as typically measured is content neutral. It suggests that high standards exist but tells us little about how these standards are operationalized inside schools. Therefore, what academic press means for different schools may vary. Moreover, when schools are positioned differently within the accountability system their "press" might manifest in different ways. We found that the probation schools increased instruction focus, but in ways that were designed to respond to the policy demands of the external environment – getting off of probation. Their efforts targeted certain students, certain grade levels, and certain academic subjects. In contrast, the high performing schools focused equally on mathematics and language arts instruction, emphasized improvement for all grade levels, and worked to enhance the learning opportunities of all students. The following section discusses these patterns.

Targeted Instructional Focus in Probation Schools

One of the critical issues that was continually raised at the probation schools was getting off of probation. One way that the instructional focus manifested at these schools is in an effort to increase the number of students at or above cutoff points at benchmark grades. In these approaches, school leaders target certain students or certain grade levels for extra assistance in an attempt to reach minimum acceptable performance levels. For example, at Waxton school teachers and administrators focus on the benchmark grades in order to reduce their retention rates. At Waxton, 50% of the eight professional development meetings we observed over the year were largely or entirely focused on some aspect of testing including topics such as skills tested in language arts; skills tested in mathematics; constructing multiple test items; and preparing students for the ITBS. Professional development and other efforts to improve testing, however, tended to be targeted to particular grades (those that took the test) and subject areas. The external partner focused its energy on teachers in the benchmark testing grades and provided exam preparation books only for teachers at those grade levels.

At Field school, one approach was to identify those students who were close to reaching national norms, and providing them with additional help. The school established an after-school tutoring program for these students. This tutoring process and the student selection process was discussed at a staff meeting by the assistant principal.

The after school program will start on Tuesday. All of you got the applications for your children and they need to be returned on Monday ... we have one class for every grade level. The list of students may have seemed erratic. Ms. Lawrence chose those students according to their ITBS scores. She chose those

students who she felt had the most potential to improve.

Later, a school administrator explained that the school targets those students who are closest to the threshold in its effort to get off of probation.

The targeted assistance program is ... for students who are ... very close to having the skills necessary to pass the test. ... students in this program attend three times per week from 2:30 (dismissal) until 4:30pm. Other students are allowed to come but the students who are closest to passing the exam are targeted. The Assistant Principal later explained this further stating that the school will use this program to:

Work with selected students, taking a look at the IOWA scores and just really focusing in on students that are at a median that we can work with and see if we can get some growth spurts on them.

The school external partner, who attributed this focus to the external pressure being applied by the school district, also discussed this strategy.

They [the school] leave behind [lowest performing students] and focus on [the higher performing]. So many principals are under this pressure. It's the name of the game. When Vallas [the district CEO] comes and they have their region meetings, they are told they have to get off probation. Even if your school shows growth and doesn't get off probation, they realize they will be looked at as not doing the job.

Thus the lowest performing students in this school received limited assistance in improving their scores. Instead, the instructional focus is on the students who were close to making the cut-off for probation requirements. In this case the external accountability mechanisms lead to a selective increase in instructional focus with limited implications for the lowest performing students. In addition to this selective focus, the program emphasizes content coverage (pacing) but not the teaching strategies that should be used.

Responses to testing in the probation schools were also structured by subject matter. As we noted above all of the schools focused more on mathematics and reading instruction than science instruction. However, in the probation schools, the instructional

focus emphasized one subject area – reading. For example, Waxton's administration was putting much of their efforts into language arts as opposed to other subject areas. The Waxton principal explained the school emphasis on language arts instruction:

Being very honest, language arts specifically reading is one area that could impact probation and since the school had been on probation for so long we felt a need to address that curriculum area. And the mathematics scores were slightly higher than the reading so that gave us the second reason.

While instructional emphasis is one of the outcomes predicted by proponents of testing policy, the selective emphasis on certain students, grade levels, and subject matter areas may limit the impact of the policy for all of the students in the school. Moreover, the selective targeting of students seems to run counter to the intended impact of the policy. Students who face challenges may in fact be marginalized by the responses of school leaders in low performing schools.

Testing and Instructional Focus in High Performing Schools

In both high performing schools the exams are used to identify high and lowperforming groups of students. However, in contrast to the probation schools, the high performing schools adopted interventions for *all* students, not just a sub-category. At Baxter school, test score data was used by school leaders and teachers to diagnose the effectiveness of certain teaching approaches. For example, when 5th grade teachers at Baxter met to discus the prior years test results, they were pleased that the overall percentage of students at or above national norms had increased. However, upon closer examination, they discovered that the increases were among students moving from the second to the third quartile. In discussing this, they determined that as a group it was likely that they had been focusing instruction on students in the middle range, potentially not addressing the needs of the lowest and highest performing students. As Baxter's

principal explained, while the school advocates heterogeneous grouping the teachers had identified a potential pitfall.

If you're go and you look at the data that's out there about how student grouping effects achievement and you recognize that heterogeneous grouping with a competent teacher is gonna be your best shot at being able to give everybody an opportunity to succeed. What's the biggest challenge you then have as a teacher? Well the challenge is how do you deal with that? How do you manage that enormous diversity of talent that's in front of you? ... How do you do that?

That is to say you know the moment that you allow yourself as a teacher to either shoot at the middle you're gonna be, and under-serve the youngsters who are really more ready. Or even worse, that you out of mostly good intentions to drive most of your teaching efforts by those youngsters who require the most remediation and are most needy of your time and who you're feeling most guilty because you're not serving.

Given their review of the test score data at the fifth grade level and similar analyses at other grade levels, the school developed an approach that sought to address the needs of all of the students while maintaining heterogeneous grouping.

Well, our assumption is that in order to be able to [address the needs of all students] you need to teach high, if I can use that sort of piece of jargon, you need to teach high and re-teach to the middle and lower. ... the strategy at the school is to continue to do the whole group instruction high. Teaching you know the mass majority of that whole group instruction is to teach high and then to make remedial provisions within the classroom as well as out of the classroom for additional tutorial and other kind of remedial work to get to those youngsters who are not getting it the first time. That's the strategy.

At Baxter the analysis of movement within quartiles, and teachers' and school leaders' interpretation of that data, highlighted an instructional practice that needed to be revised. Test results therefore informed teaching strategies in ways that targeted the instructional focus toward all students rather than a sub-category.

The instructional focus of the high performing schools also extended beyond the benchmark grades to include all grade levels. At Baxter, school leaders tracked test score trends for all students and focused attention to all grade levels. For example, spearheaded by the principal, Baxter's leadership committee undertook careful study of school standardized test data in math. They wanted to know how and whether high math scores in grade 3 were being sustained or not through grade 5. Through longitudinal analysis, the team determined that somewhere in grade 6, students' scores started to slump. Suspending school convention, the leadership committee convened a joint task force of two groups that traditionally had little interaction: the third and fourth grade teachers and the fifth and sixth grade teachers. This joint committee met for the good part of a year and as a result of their work tried to build greater alignment in math topic coverage across grade levels. Therefore test data provides an important resource for planning at this school with the instructional focus extending to all grade levels rather than a subset. Kelly school used the monitoring system discussed above to target instruction to all students and all grade levels in ways similar to Baxter School.

Testing resulted in very different patterns of instructional focus at the two sets of schools. In the probation schools, the instructional focus became targeted at certain grade levels, certain students, and certain subject areas. Low-performing students and students at non-benchmark grades were unlikely to be impacted by these strategies. In contrast, the high performing schools targeted instruction at all grade levels and all students. Though not reported in the data here, they also maintained a balance between mathematics and literacy instruction.

Discussion and Conclusion

Having examined schools' responses to high stakes accountability policy in high performing schools and probation schools we argue that these contexts impact how the policy is enacted. Proponents of these policies argue that they will create new incentives for teachers, provide objective information for school decision making, increase academic press, and that the combination of these mechanisms will reduce gatekeeping practices. Our data suggest that, across each dimension, leaders at probation schools and high performing schools structured their responses differently.

In probation schools, responses to high stakes accountability emphasize getting off of probation, partially through managing the impressions of external stakeholders. These efforts to convince outsiders that the school was making change efforts perverted the intention of the policy in certain circumstances, prompting an emphasis on the trappings of instructional innovation rather than substantive change. In addition, leaders at these schools used test results to look at overall school and grade level outcomes but do not connect these results explicitly to instructional decisions as supporters of these policies suggest they would. Finally, with regard to increased instructional focus (academic press), while school leaders were able to demand teachers attention through a combination of threat and encouragement, they focused this attention in a process best described as "selective press" which targeted specific grade-levels, students, and subject matter areas all emphasizing reaching the goal of each school – getting off of probation.

In contrast, the incentive structure at high performing schools pushed school leaders to reward and encourage teachers for their accomplishments while creatively pushing for continued improvement. These schools use test data to track macro processes of student performance and set the schools' instructional agenda. This instructional agenda, unlike at the probation schools, focused on all students, all grade levels, and

balanced attention to both of the core subject areas. Therefore, some of the key mechanisms through which high stakes accountability are supposed to impact students' educational opportunities are constructed very differently depending on the school's status in relation to the accountability system. This is very important considering that students race and class often play a role in the type of school they attend.

Proponents of high stakes accountability suggest that these policies will reduce schools' gatekeeping processes and increase academic press. The data from these schools suggests that the extent to which this is the case may depend on the status of the schools in relationship to the high stakes accountability policy. The data from Field and Waxton demonstrate that their response to accountability policy is situated in their probation status which structures school-level responses to high stakes accountability in important ways. Because probation status adds pressure to school leaders and teachers, it can lead to practices that increase rather than reduce gatekeeping processes. For example, Field School's practice of focusing tutoring programs to serve only the students who are close to national norms may have detrimental impacts on the lowest performing students, those who the policy is designed to help. These students may be marginalized from interventions that could increase their educational outcomes. Moreover, the targeted responses of these schools, focusing on benchmark grades and subject areas with the greatest chance of passing the probation threshold seems equally problematic. Focusing on the benchmark grades for intervention suggests that the increase of academic press may only impact a sub-set of students. Likewise, if the subject matter areas are selectively focused upon this may ultimately limit students access to knowledge. The responses of Waxton and Field schools do not seem to represent an increase in academic press as much as a calculated, strategic effort to respond to the policy demands of the external environment which may ultimately marginalize the lowest performing students.

Unlike the probation schools, the responses of school leaders at high performing schools seem to more closely match the outcomes predicted by testing supporters. They contribute to the development of clearer instructional foci and seem to reduce gatekeeping processes within these schools by focusing on improving the learning opportunities for all students across all grade levels.

The responses of these schools suggest that the implementation of accountability policy may work against increased educational equality. If higher performing schools construct the policies in ways that increase their academic press and reduce gatekeeping while lower performing schools have the opposite effect, focusing primarily on responding to external threats, then the policies could exacerbate rather than challenge educational stratification. The situated nature of policy implementation should be an important consideration for school reformers. Policy implementation is very much a local process and understanding the variation in context even within districts appears to be critical. Moreover, the fact that the likelihood of attending schools of different quality is associated with social class, race, and residential segregation suggests that broader structural factors impact school level processes in ways that should be attended to by policy makers.

This paper is not meant to argue against high-stakes accountability. In reality, these policies have led to increases in students test results across the Chicago district and show promise for increasing schools' focus on instruction, even if this happens in imperfect ways. However, this paper is meant to sound a cautionary note with regard to the reduction of race and class stratification. The findings reported here suggest that the highest performing schools, those with higher percentages of middle-income and white students, may benefit more from accountability policy than the probation schools that are most in need of improvement. While this is clearly not the intent of the policy, attention should be given to the potential implications of this process.

References

Anyon, J. (1981). Social class and school knowledge. Curriculum Inquiry, 11(1) 3-42.

Argyris, C. and D. A. Schon (1974). Theory in Practice: Increasing Personal Effectiveness. San Francisco, Jossey-Bass.

Ayalon (1994) Monopolizing Knowledge? The Ethnic Composition and Curriculum of Israeli High Schools. Sociology of Education. 67(4)

Bankston and Caldas (1996) Majority African American Schools and Social Injustice: The Influence of De Facto Segregation on Academic Achievement. *Social-Forces*, 75(2):535-555.

Barr, R. and R. Dreben. (1983). How Schools Work. Chicago: University of Chicago Press

Becker, H. J. and J. L. Epstein (1982). "Parent Involvement: A Study of Teacher Practices." Elementary Schools Journal 83: 85-102.

Blau, P. M. and O. T. Duncan. (1967). The American Occupational Structure. Chicago, University of Chicago Press.

Bourdieu, P. (1977). Outline of a Theory of Practice. Cambridge: Cambridge University Press.

Bourdieu, P. (1986). The Forms of Capital. Handbook of Theory and Research of the Sociology of Education. J. G. Richardson. New York, Greenwood Press: 241-258.

Bourdieu, P. and J. C. Passeron (1990). Reproduction in Education, Society, and Society. Beverly Hills, CA, Sage.

Bowles, Samuel. and Herbert. A. Gintis. 1976. Schooling in Capitalist America. New York: Basic Books.

Bronfenbrenner, U. (1979) The Ecology of Human Development: Experiment By Nature and Design. Cambridge MA: Cambridge University Press.

Brophy, J. and T. L. (1986) Good Teacher Behavior and Student Achievement: 328-375.

Burton, L. (1993). "Black Grandparents Rearing Children of Drug-Addicted Parents: Stressors, Outcomes, and Social Service Needs." The Gerontologist 32: 744-751.

Carbonaro, W. J. (1998). "A Little Help From My Friends Parents: Intergenerational Closure and Educational Outcomes." Sociology of Education 71: 295-313.

Clark, C. and Peterson, P. (1986). Research on teacher thinking. In M. C. Wittrock (Ed.), Handbook of Research on Teaching, 255-296. New York: MacMillan.

Clotfelter and Ladd (1996)

Cohen, D.K. (1989). Teaching practice: Plus ça change..... In P.W. Jackson (Ed.), Contributing to educational change: Perspectives on research and practice, (pp. 27-84). Berkeley, CA: McCutchan.

Cohen, David K., and Deborah Lowenberg Ball (1998). Instruction, Capacity, and Improvement. Philadelphia: University of Pennsylvania, CPRE: CPRE Research Report Series, RR-42.

Cohen, D., Spillane, J., Jennings, N., & Grant, S. (1998). Reading Policy. Ann Arbor, MI: University of Michigan.

Cole, Michael, and Yrjo Engestrom "A cultural-historical approach to distributed cognition." In Distributed cognition: Psychological and educational considerations, edited by G. Salomon, chapter 1. New York: Cambridge University Press, 1993.

Coleman et al (1997) Redesigning American Education. Boulder: Westview Press Coleman, J. (1988). "Social Capital in the Creation of Human Capital." American Journal of Sociology 94: S94-S120.

Coleman, J. S. and T. Hoffer (1987). Public and Private High Schools: The Impact of Communities. New York, Basic Books.

Coleman, J., E. Q. Campbell, C. J. Hobson, J. McPartland, A. M. Mood, F. D. Weinfield, and R. L. York, (Eds.) (1966). Equality of Educational Opportunity. Washington, D.C.: U.S. Government Printing Office.

Comer, J. P. (1980). School Power: Implications of an Intervention Project. New York, The Free Press.

Connell, R., D. J. Ashenden, et al. (1982). Making the Difference: Schools, Families, and Social Division. Sydney, London, Boston, George Allen and Unwyn.

Cremin 1951. The American Common School: An Historical Conception: New York: Teacher's College Press.

Daring-Hammond, L. (1994) National Standards and Assessments: Will they improve education? *American Journal of Education*, 102 (4).

Diamond, J. B. (2000). Beyond Social Class: Cultural Resources and Educational Participation among Low-Income Black Parents. Berkeley Journal of Sociology, 44:15-54

Diamond, J B. (2001) Multidimensional Family Capital and Low-Income Black Parents' Educational Participation. Toward a Substitution Model of the Intergenerational Conversion Process. In progress

Diamond, J. B., Randolph, A., and Spillane, J. (2000). Race, Class, and Teachers' Beliefs about Students in Urban Elementary Schools: Perception, Enactment, and the Duality of Structure. Paper presentation at the Annual Meeting of the American Sociological Association. Regular Education Session. Washington, D.C., August, 2000.

Doyle, W. (1983). Academic Work. Review of Educational Research, 53, 159-199 Educational Evaluation and Policy Analysis. (1990). 12(3).

Elloitt, M. 1998. School Finance and Opportunities to Learn: Does Money Well Spent Enhance Students' Achievement? Sociology of Education, 71:223-245.

Elmore, Richard F., Penelope L. Peterson, and Sarah J. McCarthey (1996). Restructuring in the classroom: Teaching, learning, and school organization. San Francisco: Jossey-Bass.

Epstein, J. L. (1987). "Parent Involvement: What Research Says to Administrators." Education and Urban Society.

Epstein, J. L. and S. Dauber (1991). "School Programs and Teacher Practices of Parent Involvement in Inner-City Schools." Elementary Schools Journal 91: 289-303.

Epstein, J. L. and M. Sanders. 2000. Connecting Home, School, and Community : New Directions for Social Research, in Handbook of the Sociology of Education edited by Maureen Hallinan pp. 285-306.

Ericson, F. (1986). Qualitative methods in research on teaching. In M.C. Wittrock (Ed.), Handbook of research on teaching (pp. 119-161). New York: Macmillan.

Fordham, S. and J. U. Ogbu (1986). "Black Students' Success: Coping with the Burden of Acting White." Urban Review 18: 176-206.

Fuller, B., Elmore R. F., and Orfield, G. Who Chooses, Who Loses? Culture, Institutions, and the Unequal Effects of School Choice. New York: Teachers College Press.

Fuson, K. C. (1996, April). Latino children's construction of arithmetic understanding in urban classrooms that support thinking. Paper presented at the Annual Meeting of the American Educational Research Association, New York.

Fuson, K. C., Smith, S. T., and Lo Cicero, A. (in press). Supporting Latino first graders' ten-structured thinking in urban classrooms. *Journal for Research in Mathematics Education*.

Galindo, R. and Escamilla, K. (1995) A Biographical Perspective on Chicano Educational Success. *Urban Review* 27(1), 1-29.

Gamoran, A. (1986). Instructional and Institutional Effects of Ability Grouping. *Sociology of Education*, 59(4), 185-198.

Gewirtz, Sharon, Stephen J. Ball, and Richard Bowe. 1997. *Markets, Choice and Equity in Education*. Briston, PA: Open University Press.

Giddens, A. (1979). Central Problems in Social Theory: Action, Structure, and Contradiction in Social Analysis. Berkeley & Los Angeles: University of California Press.

Glaser, Barney G. and Anselm Strauss (1967). The Discovery of Grounded Theory. Chicago: Aldine.

Grossman, P. (1987). A Tale of Two Teachers: The Role of Subject Matter orientation in Teaching. Paper Presented at the Annual Meeting of the American Educational Research Association, Washington, DC

Hedges, L. V. and R. Greenwood. 1996. Have Times Changed? The Relation between School Resources and Student Performance. Pp. 74-92 in Does Money Matter? The Effect of School Resources on Student Achievement and Adult Success, edited by G. Burtless. Washington, D. C.: Brookings Institution.

Hedges, L. V. R. D. Laine, and R. Greenwald. 1994. Does Money Matter? A Meta-Analysis of Studies of the Effects of Differential School Inputs on Student Outcomes. *Educational Researcher* 23:5-14.

Hoa, L. and Bonstead-Bruns (1998). "Parent-Child Differences in Educational Expectations and the Academic Achievement of Immigrant and Native Students." *Sociology of Education* 69: 126-141.

Hofferth, S. L., J. Boisjoly, et al. (1998). "Parent Extra Familial Resources and Children's School Attainment." *Sociology of Education* 71: 246-268.

Heubert, J. P. and R. M. Hauser (eds.) (1999). *High stakes testing for tracking, promotion, and graduation*. Washingotn D.C. National Academy Press

Hutchins, E. (1995) Cognition in the Wild. Cambridge, MA: MIT Press.

Jencks, Christopher. S, S. M. Smith, H. Ackland, M. J. Bane, D. Cohen, H. Gintis, B. Heyns, and S. Mickelson. (1972). Inequality: A Reassessment of Family and Schooling in America. New York: Basic Books.

Kerbow, D. and A. Benrhardt (1993). Parent Intervention in the School: The Context of Minority Involvement. Parents, Their Children and Schools. B. Schneider and J. E. Coleman, Westview Press: 115-146.

Knapp, M. S. and Associates. (1995). Teaching for Meaning in High-Poverty Classrooms. New York: Teachers College Press.

Kozol, J. (1991) Savage Inequalities

Lambert, Linda. et al.(1995). The constructivist leader. New York: Teachers College Press.

Lareau, A. (1987). "Social Class and Family School Relationships: The Importance of Cultural Capital." Sociology of Education 56: 73-85.

Lareau, Annette (1989). Home Advantage: Social Class and Parent Intervention in Elementary Education. New York: The Falmer Press.

Lave, Jean, and Etienne Wenger. Situated Learning: Legitimate peripheral participation. New York NY: Cambridge University Press, 1991.

Lee, Valerie E., Julia B. Smith, Tamara E. Perry, and Mark A. Smylie. (1999). Social Support, Academic Press, and Student Achievement: A View from the Middle Grades in Chicago. Chicago: Consortium on Chicago School Research.

Leont'ev, Aleksei Nikolaevich. Problems of the development of the mind. Moscow: Progress, 1981.

Liberman, A., Beverly Falk, and L. Alexander (1994). A culture in the making: Leadership in learner-centered schools. New York: National Center for Restructuring Education, Schools, and Teaching, Teachers College.

MacLeod, J. 1987 Aint No Makin' It: Aspirations and Attainment in a Low-Income Neighborhood, Boulder: Westview Press

McDill, Edward L., Gary Natriello, and Aaron M. Pallas. (1986). "A population at risk: Potential consequences of tougher school standards for student dropouts." American Journal of Education, 94 (2): 135-181.

McLauglin, Milbrey., and Joan E. Talbert (1993). Contexts that matter for teaching and learning. San Francisco: Jossey Bass.

McNeal, R. B. (1999). "Parent Involvement as Social Capital: Differential Effectiveness on Science Achievement." *Social Forces* 78: 117-144.

Meier, D. (1995). *The Power of their ideas: Lessons for America from a small school in Harlem.* Boston: Beacon Press.

Miles, M. B. and A. M. Huberman (1994). *Qualitative Data Analysis: An Expanded Sourcebook*. Thousand Oaks, Sage Publications.

Muller C. and Schiller, K. (2000). Leveling the Playing Field? Students' Educational Attainment and States' Performance Testing. Sociology of Education. 73: 196-218.

Natriello, G. and McDill, E. L. (1990). *Schooling Disadvantaged Children: Racing Against Catastrophe*. New York: Teachers College Press.

Newman, F. and G. G. Wehlage (1995). *Successful School Restructuring*. Alexandria, VA, ASCD.

Newmann, Fred M., BetsAnn Smith, Elaine Allensworth, and Anthony Byrk. (2001).

School Instructional Program Coherence: Benefits and Challenges. Chicago: Consortium

on Chicago School Research.

Oakes, Jeanne (1985). *Keeping Track: How Schools Structure Inequality*. New Haven: Yale University Press.

Orfield, Gary (1993). *The Growth of Segregation in American Schools: Changing Patterns of Separation and Poverty Since 1968*. Harvard Project on School Desegregation. National School Boards Association Council on Urban Boards of Education.

Orfield, G., Bachmeier, M. D., James, D. R., and Eitle, T. 1997. Deepening Segregation in American Public Schools. Cambridge, MA: Harvard Project on School Desegregation.

Pattillo-McCoy, Mary. (1998). "Church Culture as a Strategy of Action in the Black Community." *American Sociological Review*.

Pattillo-McCoy, Mary. (2000). *Black Picket Fences: Privilege and Peril in a Black Middle Class Neighborhood*. Chicago: University of Chicago Press.

Pea, Roy D. "Practices of distributed intelligence and designs for education." In Distributed cognition: Psychological and educational considerations edited by G. Salomon, chapter 2. New York: Cambridge University Press, 1993.

Peshkin, A. (1993). The goodness of qualitative research. Educational Researcher, 22(2), 24-30.

Resnick, Lauren. (1991). 'Shared cognition: Thinking as social practice." In Perspectives on socially shared cognition. Edited by L. Resnick, J. Levine, & S. Teasley. Washington, DC: American Psychological Association (APA) 1991.

Rist, R. (1970). "Student Social Class and Teacher Expectation: The Self-fulfilling Prophesy of Ghetto Education." *Harvard Education Review* 40(3): 411-454.

Rist, R. C. (1977). On Understanding the Process of Schooling: The Contributions of Labeling Theory. In *Power and Ideology in Education* edited by Karabel and Halsey.

Roderick, M. (1994). Grade Retension and School Dropout. *American Educational Research Journal*, 31(4), 729-761

Roderick, . T. Bryk, B. Jacob, J. Q. Easton, E. Allensworth. (1999) Ending Social Promotion: Results from the first two years. Chicago: Consortium on Chicago School Research

Roscigno, V. J. (1998). "Race and the Reproduction of Educational Disadvantage." Social Forces 76(3): 1033-60.

Rosenthal, R. and L. Jacobson (1968). Pygmalion in the Classroom. New York, Holt, Rinehart, and Winston.

Sampson, R. J., S. W. Raudenbush, et al. (1997). Neighborhoods and Violent Crime: A Multilevel Study of Collective Efficacy. Science. 227: 918-924.

Sanders, M. G. (1998). The Effects of School, Family, and Community Support on the Academic Achievement of African American Adolescents. Urban Education, 33, 385-410.

Schon, D. A. (1983). The Reflective Practitioner. San Francisco, Jossey-Bass.

Sewell, William H. and R. M. Hauser 1980. "The Wisconsin Longitudinal Study of Social and Psychological Factors in Aspirations and Achievement" Pp. 59-100 in Research in Sociology of Education and Socialization. Edited by A. C. Kerckhoff. Greenwhich: Ct: JAI Press.

Sewell, W. and V. P. Shah (1968). "Parents' Education and Childrens' Educational Aspirations and Achievements." American Sociological Review 33: 191-209.

Sewell, W. and V. P. Shah (1968). "Social Class, Parent Encouragement, and Educational Aspirations." American Journal of Sociology 73(5): 559-572.

Shouse, R. (1997) Academic Press, Sense of Community, and Student Achievement. In Redesigning American Education Edited by James Coleman, Barbara Schneider, Stephen Plank, Kathryn Schiller, Roger Shouse, and Huayin Wang. Westview Press

Smith, Julia B., Valarie E. Lee, Fred M. Newman 2001. Instruction and Achievement in Chicago Elementary Schools. Consortium on Chicago School Research, University of Chicago.

Spillane, James P., John B. Diamond, , Lisa Walker, & Rich Halverson, Loyiso Jita. (in press) "Urban School Leadership and Elementary Science Instruction: Identifying, Mobilizing, and Activating Resources in a Devalued Subject Area." *Journal of Research in Science Teaching.*

Spillane, James P., Richard Halverson, and John B. Diamond. (2001). "Investigating school leadership practice: A distributed perspective." Educational Researcher, 30 (3): 23-28.

Stake, R. E. (1995). The Art of Case Study Research. Thousand Oaks, CA: Sage.

Stodolsky, Susan. The subject matters. Chicago: University of Chicago Press, 1988.

Strauss, A. (1987) Qualitative analysis for social scientists. Cambridge University PressWilson, William. J. 1987. The Truly Disadvantaged: The Inner City,The Underclass and Social Policy. Chicago: University of ChicagoPress.

Wong, R. S. 1998. "Multidimensional Influences of Family Environment in Education: The Case of Socialist Czechoslovakia." *Sociology of Education* 71:1-22.

Table 1.

Mean Percentage of Students in CPS Probation, Magnet and High Performing Schools by Race and Social Class

	District	Probation	Magnet	High Performing
% African American	52%	83%	53%	27%
% White	10%	.12%	17%	34%
% Low Income	84%	92%	55%	56%

Table 2. School Demographics

School Name	Racial Composition	% Low-income
Baxter	40% White	63%
(High Performing)	6% Black	
	26% Hispanic	
	26% Asian	
Field	100% African American	99%
(Probation)		
Kelly	100% African American	85%
(High Performing)		
Waxton	100% African American	97%
(Probation)		

High Stakes Accountability in Urban Elementary Schools:



Challenging or Reproducing Inequality?

Appendix A

nicago Public Schools Student Population by Percent Low-Income **Percent Non-Low-**Income 16% **Percent Low-**Income 84%

Percentage of Low-Income Students in Chicago Probation Elementary Schools





¹ We define high performing schools as schools where 50% or more of the students perform at or above national norms on the Iowa Test of Basic Skills. The Chicago Public Schools define probation schools as

ercentage of Low-Income Students in Chicago Elementary Schools Scoring 50% or higher on ITBS Reading



⁸ This percentage of students at or above national norms has increased incrementally since that time.
⁹ The categories of influence included other teachers, principals, assistant principals, the local school council, parents, testing, standards, textbooks, and instructional specialists (i.e. mathematics teachers).
¹⁰ For example, in the case of a literacy committee report which drew extensively on test results, the Russian Bilingual teacher, a reading teacher, the librarian, the reading specialist, the drama teacher, and a local school council representative were all involved in the interpretation of test results and the development of the report.

¹¹ The item analysis is a document that shows classroom and student level test scores by the items correct and incorrect.

¹² The principal had a similar response for language arts. We limit the discussion to mathematics in order to save space.

¹³ While they may not gain as much in terms of absolute test score results, this likely occurs because of the fact that gains are more difficult at the top end because of ceiling effects.