

**Leadership, Organizational Characteristics,
and Performance
in
North Carolina High Schools**

March 2008



THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL

Carolina Institute
For Public Policy

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Financial support for this study was provided by the North Carolina Department of Public Instruction. The authors assume all responsibility for interpretations and any errors. Additional copies of this study can be requested by contacting Dr. Gary T. Henry, Department of Public Policy, CB#3435, University of North Carolina – Chapel Hill.

Acknowledgements

We extend our thanks to all of the principals and teachers in the eighteen high schools that agreed to participate in this study. Without the time and information that they so generously gave us, we could not have developed the insights which we believe this report provides.

We also wish to thank our faculty and graduate assistant colleagues at UNC Chapel Hill and Georgia State Universities. Gary Henry of the Department of Public Policy at Carolina shaped the entire framework within which the project unfolded, proposed the strategy of studying contrasting schools, identified ways to connect the quantitative and qualitative components, participated in data collection and analysis, and provided important feedback on several drafts of the report. Kirsten Kainz analyzed data for site selection and led a team of graduate assistants in conducting interviews of principals. UNC-CH doctoral students Renee Carmon, Aaron Cooley, Adrienne Geraghty, Cary Gillenwater, Julie Keane, AlveraLesane, CicilyMcCrimmon, Trip Stallings, and Chris Scott conducted and wrote up interviews of principals and teachers at participating schools.

In addition, we thank JB Buxton and Philip Price of the NC Department of Public Instruction and Ann MacArthur of Governor Easley's Education Office for their support throughout this project.

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Executive Summary

This report is part of a broader study designed to improve understanding of differences in academic performance in high schools across North Carolina. In a separate report, the study team has shown that differences in the characteristics of student populations, financial expenditures, and teacher quality variables all account for significant variation in high school students' academic performance. This report draws on interview data with principals and teachers in four contrasting sets of high schools to explore the role that principal leadership and resulting organizational characteristics may play in shaping school performance.

The four sets of high schools include five schools with challenging student populations that are outperforming expectations ("Beating the Odds or BTO schools"), eight serving similar populations that have been designated Low Performing or Priority schools ("LP-Priority schools"), two with similar populations that were previously identified as Low Performing or Priority schools but have improved sufficiently to shed that designation ("Improved schools"), and three schools chosen for their high performance without regard to demographics (High Performing or HP schools").

We found that in BTO and Improved high schools, principals had worked actively to cultivate organizational commitment, to hold both individual teachers and groups of teachers responsible for learning outcomes, and thus to strengthen the school's resilience – its ability to withstand the inevitable setbacks and disappointments. Enlisting active cooperation from teachers, BTO-Improved school principals also effectively recruited, retained, and strengthened their faculties through supervision, professional development, and professional learning communities. Driven by a common commitment to the organization and its goals, and by a combination of administrative and professional accountability, teachers and principals created a disciplined environment for learning and implemented a distinctive set of curricular, instructional, and assessment practices. They did so with an evident determination to assure high levels of learning by all of their students.

In Low Performing and Priority high schools, principals have generally not been as effective in building the same levels of organizational commitment, individual and collective responsibility, and resilience. Morale and reputational problems have made it difficult to recruit, train, and retain faculties of similar quality. As environments, the LP-Priority schools seem to lack the powerful combination of discipline and caring observed in BTO and Improved Schools. And finally, they have not implemented nearly so fully or forcefully the effective curricular, instructional, and assessment practices observed in BTO and Improved schools.

We chose the Beating the Odds schools strategically for their ability to produce high rates of learning with challenging student populations – high percentages of students with low entering reading and math skills, high percentages of students from low income families, and high percentages of students from traditionally disadvantaged ethnic groups. By cultivating the elements of will and capacity outlined above, all five Beating the Odds schools were able to

produce High Growth in 2004-2005. Four of the five produced High Growth in 2005-2006, and the other produced Expected Growth. In both years, all five earned designations as Schools of Progress. But despite extraordinary leadership, will, and capacity, in neither year could a single one of them produce a Performance Composite that would entitle it to designation as a School of Distinction or School of Excellence. By contrast one high school with a similar profile of leadership, will, and capacity but less challenging demographics was able to earn Honor School of Excellence status in 2004-2005 and School of Distinction status in 2005-2006.

It is important to note that in 2004-2005, the LP-Priority schools in our sample – schools that are often called “failing schools” – all produced either High Growth (3 schools) or Expected Growth (5 schools). They all met or exceeded the State of North Carolina’s expectations for the average amount of learning their students should achieve in an academic year. In the next year, apparently as a result of changes in the ABCs system, the designation fell to Growth Not Achieved in three LP-Priority schools, but three made Expected Growth and two made High Growth. Thus, out of 16 opportunities (2 years x 8 schools), the LP-Priority schools made High Growth 5 times (31%), Expected Growth 8 times (50%), and Growth Not Achieved 3 times (19%). They met or exceeded the state’s expectations for student learning over 80% of the time. Performance Composites in the 30s, 40s, and 50s are certainly not consistent with the obligation to ensure that all of the state’s children have an equal opportunity to get a sound basic education. But neither are the data consistent with the assertion that it is these high schools alone that are failing to make good on that constitutional obligation. The data clearly indicate that the problems in our education system begin earlier and are more widely distributed.

Introduction

This report is part of a broader study designed to improve understanding of differences in academic performance in high schools across North Carolina. The study team is based at the University of North Carolina at Chapel Hill and involves faculty and graduate students from UNC-CH and East Carolina University. As the team has shown in a separate report (*North Carolina High School Resource Allocation Study: Final Report*), differences in the characteristics of student populations across NC high schools account for the preponderance of the differences in Performance Composites from one high school to another. When other key variables are controlled for, both financial expenditures and teacher quality variables explain statistically significant and important differences in performance. But a substantial proportion of the variation in high schools' performance remains unexplained.

What explains the remaining variation? Governor Easley, members of the General Assembly, members of the State Board of Education and the top leadership of the NCDPI, and both the NC Supreme Court and Judge Howard Manning seem to agree that school leadership is second only to teacher quality as an "educational asset" in assuring all students an equal opportunity to get a sound basic education. Research has confirmed that principals' leadership makes a significant if small contribution to student learning outcomes in most schools and is crucial to turn around low performing schools (Leithwood & Riehl, 2003). Thus, because of its currency in policy discussions, judicial findings, and research, the study team examined the extent to which differences in principals' leadership and associated organizational characteristics may help explain the variation in student learning outcomes produced by high schools across the state. In the main study report, we summarized the results of our inquiry into school leadership and organizational characteristics. In this report, we describe our study approach and spell out our findings in much greater detail.

To structure our investigation, we identified four contrasting sets of schools for study. The first was a set of five high schools which served challenging student populations but which produced higher levels of student performance than would be expected in light of the challenges their students posed. We called these "Beating the Odds" (BTO) schools because they "beat the odds" against low performance. Second, we chose a set of ten persistently Low Performing or Priority Schools ("LP-Priority" schools) with student populations that were very similar to those served by the Beating the Odds schools. Third, we selected two large urban schools that were on Judge Manning's original list in 2004-2005 but had improved sufficiently by 2005-2006 to come off the list ("Improved" schools). The logic of sample selection was as follows: all three of these sets of schools served similarly difficult-to-educate student populations. So the differences in performance across the sets must result from other variables, probably including leadership and organizational variables. By interviewing the principals and teachers in these schools, we sought to identify what the principals were doing differently in different sets of schools, with what impact on the schools as organizations, and with what resulting impact on student learning outcomes. The fourth and final set of schools were three of the highest-performing schools in the state ("HP" schools), regardless of student demographics. We reasoned that even though these schools would be very different from the others demographically, the contrasts between leadership and associated organizational characteristics in these schools and the same variables

in the other schools might be sharp and instructive. By examining the contrasts among the leadership-organizational profiles of the four sets of schools, we expected to learn some important lessons about whether such variables do shape student performance, and if so, how. As we expected, the BTO and Improved schools did share a common leadership-organizational profile which contrasted both with the profile of the LP-Priority schools and with that of the High Performing schools.

Methods

Before presenting our findings, we explain in this section how we selected the four sets of schools, what the sample of schools looked like and how the schools in each set compared to state averages and to schools in the other sets within our sample, and how we carried out our study. Readers who wish to “cut to the chase” may proceed directly to the Findings, which begin on page 14, but the approach presented below does frame and help explain the significance of the findings.

Of particular importance in this section are the comparisons across the four sets of schools with respect to demographics, financial expenditures, teacher quality, and performance and “growth,” or the average amount of learning each of them produced in an academic year. As we shall show, despite the pains we took to select demographically similar schools, demographic differences may explain a portion of the performance and growth differences across the four sets of schools in our sample. Expenditure differences do not. Modest but potentially meaningful differences in teacher quality across the sets of schools may explain some of the differences in learning outcomes, and the results of our qualitative study illuminate how Beating the Odds schools attract and retain good teachers. The remaining growth and performance differences not explained by other variables may be explained in part by the differences in principal leadership and resulting organizational characteristics that we identified through our interviews with principals and teachers in the four sets of schools. As we note below, the BTO schools edged out the LP-Priority schools in terms of growth and performance, but there appeared to be a ceiling on what even the BTO schools could achieve with such challenging student populations. And it is very important to point out that in most cases, the LP-Priority Schools produced as much or more learning than the state’s accountability system demands that they produce. Their students simply started “behind the curve,” and even High Growth could not bring their students fully up to the grade level standard that demarcates a “sound basic education.”

School Selection

To identify the Beating the Odds schools, we used 2004-2005 data on seven variables to “predict” NC high schools’ performance composites: their students’ mean 8th grade reading and mathematics EOG scores and the percentages of Free Lunch, Reduced Lunch, disabled, Black, and Hispanic students in the school. Prior research had shown that all of these variables affect students’ achievement scores. Using ranked standardized residuals from a multiple regression procedure, we identified several schools with high proportions of minority and low-income students that performed well above the expected level. We then assembled data on these schools’ mean scores on all EOC tests for the five year period ending in 2006, and we eliminated

from the list any schools whose 2005 performance proved a quirk, including those whose performance had dropped significantly from 2005 to 2006. We preferred schools that showed steadily higher than expected performance and those whose performance had risen over the five years. This procedure yielded a set of five schools with challenging populations that were “beating the odds” on a regular basis.

In our regression analysis, three student background variables accounted for the largest shares of variation across high schools: 8th grade mathematics scores, the percentage of students receiving federally subsidized free lunches, and the percentage of students who are Black. We judged that the mean 8th grade reading scores were also important indicators of the resources for learning that students brought into the schools, and we also wanted to assure that we included schools with substantial Hispanic and Native American populations. In selecting Low Performing or Priority schools to study for contrasts with the Beating the Odds schools, we therefore chose only LP-Priority schools in the same range as the BTO schools on (1) the percentage of students participating in the Free Lunch program, (2) the total percentage of students who were African-American, Hispanic, or Native American, (3) mean 8th grade math scores, and (4) mean 8th grade reading scores. Differences in performance between the Beating the Odds schools and LP-Priority schools would thus result mainly from factors other than student demographics.

By the time we selected schools for study early in 2007, a total of 7 high schools originally on Judge Manning’s list of 44 with performance composites under 60% for five years had either improved their scores sufficiently to escape the list or had been removed for other reasons. Because all five of the Beating the Odds schools we had selected were relatively small and happened to be located in rural areas or small towns, we sought to include some large, urban “Improved” schools in our sample. The prospect of studying challenging schools that had improved recently was also attractive. The changes that accounted for the improvements would probably be readily identifiable and fresh in principals’ and teachers’ minds. So we chose two very large urban Improved schools for investigation.

Finally, we believed that it would be useful to include a small number of the very top performing high schools in the state in the sample, regardless of student demographics. We wondered whether something that these High Performing schools might be doing could provide lessons for even the Beating the Odds and Improved schools. On the other hand, our regression analysis had told us that these schools were likely to prove overwhelmingly White and well-to-do. Would the differences in student population mean that the High Performing schools were so different from those with challenging populations that the HP schools’ practices would have little relevance for the other schools? Whichever way our data pointed, the results seemed likely to be instructive. So we chose three of the highest-performing schools in the state, taking care to exclude any that were so small or so specialized that many educators and policymakers might be likely to dismiss them on those grounds alone.

Sample of Schools

Our selection process yielded a total of twenty high schools for intensive study. Given the time and resources available, conducting detailed interviews of the principals and teachers at more

schools would prove infeasible. Yet we had an obligation to visit all 37 schools that remained on Judge Manning's list of Low Performing and Priority high schools. So we decided to study the remaining 27 LP-Priority high schools in somewhat less depth. What we learned in these schools would serve primarily as a check on the validity of what we would find in the smaller primary study. As we sought entry into the schools selected for the primary, more intensive study, we were unable to schedule interviews in two of the selected schools despite repeated and persistent attempts. So our sample for the primary study ultimately included only 18 schools.

Table 1 below presents the composition of the 2004-2005 student populations of the 18 schools included in our primary study, featuring for each school the percentage of students receiving Free Lunch or Reduced Price Lunch, the percentages in four ethnic groups, the percentage identified for special education, students' prior achievement (mean scores on 8th grade EOG Mathematics and Reading tests), and the Performance Composite score. As indicated above, the ranges of the BTO schools and the LP-Priority Schools on (1) Free Lunch percentage, (2) percent African-American, Hispanic, or Native American, (3) mean 8th grade EOG math scores, and (4) mean 8th grade EOG reading scores are very similar. We should note, however, that the mean percentage of students who were African-American in the BTO schools was 53.4%, substantially below the mean for LP schools, which was 65.8%. Given the predictive power of the percentage of students who are African-American, we cannot rule out the possibility that some of the differences between the outcomes for BTO versus those for LP-Priority schools result from demographic differences rather than differences in leadership practices and related organizational characteristics. Table 2 displays the same characteristics for 2005-2006.

One of the High Performing schools — Jack Britt High School — deserves special mention. Britt was one of the state's highest performing in '04-'05, with a 90.8 Performance Composite — comparable to Weddington High School's 90.6 and less than a point below Green Hope High School's 91.7. So Britt clearly qualified as a High Performing High School. Yet in '04-'05 its percentages of African-American and Hispanic students (37.6% African-American, 6.9% Hispanic) were much higher than Green Hope's (7.8% African-American, 4.2% Hispanic) and Weddington's (3.5% African-American, 2.4% Hispanic) and not far below the average for the BTO schools (50.1% African-American, 8.3% Hispanic). Britt's Free and Reduced price Lunch percentages were also substantially higher than those at Green Hope and Weddington but substantially lower than the comparable percentages for the other BTO schools. So in performance terms, Britt was a high-performing school, but ethnically it was closer to the BTO schools and even in terms of Free and Reduced Price Lunch percentages, its student population was more challenging than the other two High Performing schools. It is not surprising, then, that when we conducted our interviews at Britt, we found that its profile of leadership practices and organizational characteristics resembled the BTO profile much more closely than the profile for the other two High Performing schools. We shall return to this point in the discussion of our findings below.

Table 1: Demographic Composition of NC High School Student End-of-Course Testing Population in 2004-05

	Poverty	Race/Ethnicity				Special Education	Prior Achievement		Performance
	% Free and Reduced Lunch	% African-American	% Hispanic	% Native American	% Other Minority	% Special Education	Average Grade 8 Math Score	Average Grade 8 Reading Score	Performance Composite
All NC Schools (n=337)	30.0	29.0	5.0	1.0	4.0	10.0	271.8	220.3	74.0
LP/Priority (n = 8)	54.4	65.8	5.9	< 1	3.3	11.9	265.3	215.6	51.2
BTO & Improved (n = 7)	50.5	53.4	8.6	5.0	3.6	7.9	267.2	215.3	67.7
HP (N=3)	10.0	15.8	4.5	< 1	6.7	8.7	277.1	223.0	91.0
LP/Priority									
Anson	57.0	58.0	1.0	< 1	2.0	10.0	267.6	216.7	53.7
Carver	47.0	68.0	4.0	< 1	2.0	12.0	265.4	215.7	45.6
Hertford	58.0	80.1	1.0	1.0	< 1	11.0	263.5	213.0	48.3
Parkland	51.0	60.0	8.0	< 1	3.0	13.0	265.2	215.6	59.9
Plymouth	58.0	80.0	< 1	< 1	1.0	13.0	264.2	214.6	50.6
E.E. Waddell	55.0	57.0	21.0	< 1	4.0	12.0	266.3	215.5	48.4
W. Mecklenburg	58.0	61.0	7.0	< 1	9.0	13.0	265.3	217.6	47.9
Warren	52.0	76.0	1.0	4.0	1.0	11.0	264.2	214.5	54.8
Improved									
Independence	41.0	53.0	10.0	1.0	4.0	8.0	269.5	214.4	56.7
Vance	43.0	60.0	9.0	1.0	7.0	8.0	268.5	215.7	53.4
BTO									
N. Edgecombe	69.0	84.0	2.0	< 1	1.0	7.0	261.9	213.2	73.4
Fairmont	73.0	42.0	1.0	25.0	1.0	6.0	265.2	217.5	75.4
Saint Pauls	68.0	35.0	9.0	19.0	1.0	9.0	265.1	216.6	72.5
Tarboro	47.0	60.0	6.0	< 1	< 1	9.0	264.7	211.9	71.2
Thomasville	64.0	46.0	16.0	< 1	3.0	6.0	267.8	218.1	71.8
HP									
Jack Britt	22.0	38.0	7.0	1.0	5.0	8.0	271.6	217.8	90.8
Green Hope	6.0	8.0	4.0	< 1	11.0	11.0	279.6	222.8	91.7
Weddington	3.0	3.0	2.0	< 1	3.0	6.0	279.7	228.7	90.6

Table 2: Demographic Composition of NC High School Student End-of-Course Testing Population in 2005-06

	Poverty	Race/Ethnicity				Special Education	Prior Achievement		Performance
	% Free and Reduced Lunch	% African-American	% Hispanic	% Native American	% Other Minority	% Special Education	Average Grade 8 Math Score	Average Grade 8 Reading Score	Performance Composite
All NC Schools (n=337)	33.0	33.0	5.0	1.0	4.0	10.0	273.6	244.3	68.5
LP/Priority (n = 8)	60.1	67.3	5.9	< 1	3.4	12.0	267.7	240.7	47.4
BTO & Improved (n = 7)	54.6	56.1	8.3	5.1	3.7	9.0	269.1	241.5	64.4
HP (N=3)	10.5	14.0	4.2	< 1	7.2	8.5	278.8	249.1	86.5
LP/Priority									
Anson	62.0	60.0	< 1	< 1	2.0	12.0	268.2	238.4	46.5
Carver	55.0	69.0	5.0	< 1	2.0	12.0	267.5	238.1	39.5
Hertford	60.0	82.0	1.0	1.0	1.0	12.0	267.4	239.9	41.3
Parkland	54.0	61.0	11.0	< 1	4.0	13.0	267.9	240.7	52.9
Plymouth	66.0	83.0	< 1	< 1	1.0	11.0	265.5	236.3	49.0
E.E. Waddell	63.0	58.0	20.0	1.0	4.0	12.0	268.1	244.1	49.3
W. Mecklenburg	62.0	62.0	6.0	1.0	9.0	12.0	268.3	245.4	48.0
Warren	62.0	77.0	2.0	4.0	1.0	11.0	267.5	239.7	52.5
Improved									
Independence	46.0	57.0	11.0	1.0	4.0	9.0	270.3	241.7	63.3
Vance	47.0	64.0	9.0	< 1	7.0	8.0	269.8	243.2	60.8
BTO									
N. Edgecombe	72.0	86.0	2.0	< 1	1.0	7.0	266.8	241.4	66.3
Fairmont	73.0	40.0	1.0	26.0	1.0	12.0	268.6	244.1	64.7
Saint Pauls	69.0	34.0	8.0	21.0	1.0	10.0	266.9	238.3	67.2
Tarboro	51.0	61.0	5.0	< 1	1.0	9.0	267.7	236.3	65.3
Thomasville	67.0	56.0	12.0	< 1	4.0	7.0	269.2	243.8	63.2
HP									
Jack Britt	25.0	37.0	7.0	1.0	5.0	7.0	273.5	245.5	83.5
Green Hope	5.0	6.0	3.0	< 1	12.0	11.0	280.9	249.0	91.2
Weddington	3.0	3.0	2.0	< 1	3.0	5.0	281.1	252.6	84.9

It will also be useful to show where the schools in the qualitative sample fall in the distribution of all traditional North Carolina high schools in terms of (a) financial expenditure levels and allocations and (b) teacher quality.

As we see in Table 3 on the next page, in 2004-2005 total per pupil expenditures in the eight LP-Priority Schools averaged about \$7,936, some \$508 per pupil higher than in the BTO and Improved schools. In 2005-2006, spending in the LP-Priority schools was about \$447 higher than in the BTO-Improved schools. So the performance advantage in the BTO-Improved schools cannot result from higher levels of expenditures. It is worth commenting that the higher average level of total per pupil expenditure in the LP-Priority schools probably stems from the demographic differences noted above. Higher percentages of Free and Reduced Price Lunch students carry with them additional categorical funding for compensatory educational purposes. Note also that LP-Priority schools spent more than BTO schools in nearly all of the student-related spending categories displayed in the table. Both LP-Priority and BTO schools spent more per pupil than the average NC high school (\$6,824 in '04-'05 and \$7,067 in '05-'06) and than the average of our three High Performing schools (\$5,611 in '04-'05 and \$5,722 in '05-'06).

Table 3: Total and Selected NC High School Expenditure Distribution in 2004-05 and 2005-06

Per Pupil	Total		Regular Instruction		Special Instruction		Supplemental Education Services		Student Services	
	2004-05	2005-06	2004-05	2005-06	2004-05	2005-06	2004-05	2005-06	2004-05	2005-06
All NC Schools (n=337)	6,823.75	7,066.90	3,272.41	3,353.35	566.56	593.77	73.95	61.04	299.73	311.77
LP/Priority (n = 8)	7,936.37	8,274.76	3,518.86	3,401.49	803.71	939.69	121.46	87.86	459.82	452.27
BTO & Improved (n = 7)	7,428.15	7,827.44	3,390.93	3,535.16	679.94	771.03	103.85	22.30	383.07	376.40
HP (N=3)	5,611.26	5,721.63	2,840.18	2,886.35	462.21	463.07	41.73	39.98	289.83	293.31
LP/Priority										
Anson	7,523.67	8119.0626	3,226.88	3,299.79	720.88	786.10	211.62	242.83	678.81	729.66
Carver	6,666.69	7316.8348	2,979.10	3,081.23	526.59	444.01	163.16	187.82	324.33	388.60
Hertford	9,290.94	9290.5171	3,871.95	3,890.66	1,014.80	980.55	0.00	0.00	620.37	633.96
Parkland	6,963.09	7360.0998	3,305.44	2,155.07	633.64	1,651.69	174.46	162.67	250.10	322.45
Plymouth	9,560.47	9701.8082	4,097.11	3,931.13	895.18	930.40	0.00	0.00	281.43	205.37
E.E. Waddell	8,772.46	9342.1159	3,877.96	4,164.70	982.33	936.11	169.90	22.93	586.19	586.44
W. Mecklenburg	8,135.35	8040.7407	3,861.40	3,669.02	802.35	761.83	148.46	35.48	531.77	436.32
Warren	7,530.26	8040.1908	3,161.79	3,468.74	915.99	913.03	0.00	0.00	306.30	192.44
Improved										
Independence	7,403.25	7,483.12	3,655.31	3,726.90	576.63	512.28	172.64	7.23	444.25	422.53
Vance	7,069.00	7,417.53	3,282.84	3,322.33	583.96	708.91	142.63	10.60	365.06	343.37
BTO										
N. Edgecombe	9,117.58	9,994.14	4,396.84	4,707.32	797.56	1,089.58	150.51	171.95	587.16	619.67
Fairmont	7,920.74	8,717.42	3,362.65	3,650.87	1,186.34	1,248.61	0.00	0.00	304.72	337.99
Saint Pauls	6,684.81	7,572.96	2,870.30	3,199.48	849.25	865.32	0.00	0.00	255.65	300.99
Tarboro	6,924.92	7,145.81	3,338.52	3,182.24	564.84	781.30	83.87	84.25	440.42	361.02
Thomasville	8,830.77	9,436.50	3,156.06	3,661.02	631.59	1,066.78	0.00	20.06	307.67	368.25
HP										
Jack Britt	6,168.78	6,198.35	3,056.76	3,069.05	595.95	606.13	75.72	79.37	292.12	301.68
Green Hope	5,050.48	5,118.15	2,925.09	2,979.38	444.29	448.23	0.46	0.42	293.29	312.98
Weddington	5,749.38	5,996.13	2,508.83	2,602.00	347.04	345.72	59.16	50.26	283.06	261.78

Turning now to teacher quality, as we see in Table 4 on the next page, in 2004-2005 the BTO-Improved and LP-Priority schools had similar numbers on five indicators related to teacher quality (Average Mean Praxis Scores expressed in standard deviations above or below the state mean, the percentage of National Board Certified Teachers, the percentage of teachers in their first year of teaching, the percentage of teachers with more than three years of experience, and class size, which is actually an indicator of the conditions under which teachers teach but may also affect the demand for teachers). The BTO schools enjoyed a small to modest advantage over the LP-Priority schools with respect to five indicators (the percentage with at least a master's degree, the percentage with a continuing license, the percentage with Provisional, Emergency, or Temporary licenses, the percentage entering via Lateral Entry routes, and turnover), but came out slightly worse in one (the percentage with bachelors' degrees from the nation's most competitive or highly competitive undergraduate institutions, an indirect indicators of general academic ability). As Table 5 reflects, the numbers changed a bit in 2005-2006, but BTO schools continued to have the edge in six of the eleven indicators, while there were four virtual "ties" and one indicator on which the LP-Priority schools had the edge. (In some cases, such as the percentage with Provisional, Emergency, or Temporary licenses and the percentage entering teaching via lateral entry, a lower percentage is advantageous.) So teacher quality variables may account for some of the outcome differences between BTO and LP-Priority schools. As we shall see, both principals and teachers in BTO schools attributed their performance *in part* to high quality teachers and reported little difficulty in either recruiting or retaining good teachers. In contrast, principals and teachers in LP-Priority schools reported persistent problems in finding high quality teachers to fill vacancies and in keeping them from year to year. Thus, findings from the qualitative study help to illuminate *how* BTO schools get and keep high quality teachers.

It is worth noting that there was a statewide increase of 4 points in each of two categories that the quantitative component of our study has shown to have a negative effect on EOC scores – the percentage of teachers with Provisional, Emergency, and Temporary license and the percentage of teachers coming into the profession via Lateral Entry. If our quantitative analyses are correct, this represents decline in teacher quality with implications for student outcomes. Paradoxically, the LP-Priority schools in our study had smaller-than-average increases on these indicators while the BTO-Improved had larger than average increases.

Table 4: Teacher Quality by NC High School (2004-2005)

	Education		Assessments	Licensing				Experience		Class Size	Turnover
	% At Least a Masters Degree	% Most and Highly Comp. Bachelors	Average Mean Praxis Scores	% Cont. License	% Prov./Emg./Temp. License	% Lateral Entry	% National Board Certified	% First Year Teaching	% More Than 3 Years Teaching	Average Class Size	% Teacher Turnover
All NC Schools (n=337)	33.0	14.3	0.007	80.0	7.0	3.0	9.0	5.0	86.0	22	21.0
LP/Priority (n = 8)	31.0	10.9	-0.246	70.6	11.3	7.2	4.4	6.8	84.1	21	24.7
BTO & Improved (n = 7)	34.2	9.8	-0.264	76.7	8.4	3.8	5.0	6.3	83.6	21	23.0
HP (N=3)	38.0	16.1	0.126	75.0	9.9	2.3	7.4	5.5	84.0	21	19.2
LP/Priority											
Anson	32.0	6.8	-0.207	76.0	9.0	4.0	7.0	4.2	88.9	22	17.1
Carver	34.0	16.7	-0.794	74.0	13.0	4.0	2.0	5.9	84.3	23	18.1
Hertford	20.0	8.8	-0.396	72.0	12.0	4.0	< 1	13.2	82.4	18	25.3
Parkland	24.0	15.0	-0.136	72.0	6.0	5.0	6.0	5.4	83.8	22	21.1
Plymouth	32.0	7.5	-0.108	88.0	3.0	5.0	< 1	2.6	92.3	18	16.3
E.E. Waddell	45.0	12.3	-0.059	68.0	15.0	8.0	7.0	8.3	81.9	21	33.3
W. Mecklenburg	34.0	8.6	-0.254	66.0	12.0	14.0	8.0	6.5	81.7	22	23.2
Warren	26.0	11.7	-0.178	57.0	18.0	10.0	2.0	6.8	81.4	21	27.1
Improved											
Independence	36.0	9.7	-0.142	78.0	7.0	3.0	6.0	7.8	81.8	22	19.9
Vance	38.0	13.9	-0.354	69.0	13.0	6.0	4.0	8.9	77.8	22	24.8
BTO											
N. Edgecombe	19.0	7.4	-0.060	93.0	4.0	< 1	11.0	< 1	99.0	16	35.3
Fairmont	38.0	7.0	-0.266	90.0	< 1	2.0	2.0	4.9	87.8	17	16.7
Saint Pauls	20.0	8.0	-0.342	64.0	16.0	2.0	4.0	6.5	84.8	19	28.8
Tarboro	40.0	4.1	-0.424	82.0	6.0	2.0	4.0	2.0	83.7	21	29.0
Thomasville	32.0	9.8	-0.335	80.0	5.0	10.0	2.0	2.4	92.7	19	28.6
HP											
Jack Britt	35.0	5.6	-0.044	69.0	15.0	3.0	7.0	5.6	84.1	18	17.5
Green Hope	46.0	28.2	0.231	83.0	3.0	1.0	10.0	6.0	82.1	24	21.9
Weddington	31.0	12.6	0.136	71.0	12.0	4.0	3.0	4.8	86.7	--	16.6

Table 5: Teacher Quality by NC High School (2005-2006)

	Education		Assessments	Licensing				Experience		Class Size	Turnover
	% At Least a Masters Degree	% Most and Highly Comp. Bachelors	Average Mean Praxis Scores	% Cont. License	% Prov./Emg./Temp. License	% Lateral Entry	% National Board Certified	% First Year Teaching	% More Than 3 Years Teaching	Average Class Size	% Teacher Turnover
All NC Schools (n=337)	33.0	14.3	0.011	77.0	11.0	7.0	11.0	6.7	82.4	22	21.6
LP/Priority (n = 8)	30.7	11.1	-0.203	69.0	12.7	9.6	5.9	8.4	77.9	21	25.9
BTO & Improved (n = 7)	32.4	11.1	-0.316	73.2	13.5	8.5	6.6	7.4	80.3	20	28.2
HP (N=3)	38.8	18.3	0.221	72.8	10.8	8.0	12.7	8.7	79.6	26	21.0
LP/Priority											
Anson	27.0	9.2	-0.125	77.0	9.0	8.0	12.0	6.1	83.0	17	20.7
Carver	29.0	16.3	-0.384	69.0	14.0	8.0	2.0	16.3	71.4	22	28.1
Hertford	17.0	8.6	-0.457	71.0	21.0	3.0	1.0	7.1	77.1	20	20.0
Parkland	31.0	11.0	-0.050	79.0	10.0	2.0	9.0	3.7	90.2	23	18.4
Plymouth	35.0	8.1	0.125	86.0	3.0	3.0	< 1	< 1	91.9	19	20.9
E.E. Waddell	41.0	11.9	0.065	60.0	17.0	14.0	8.0	14.3	64.3	19	42.9
W. Mecklenburg	36.0	8.8	-0.296	60.0	11.0	16.0	7.0	8.8	75.2	21	27.8
Warren	26.0	16.4	-0.390	62.0	13.0	16.0	2.0	8.1	77.0	20	16.3
Improved											
Independence	39.0	11.0	-0.160	81.0	10.0	6.0	10.0	5.8	90.3	22	27.4
Vance	37.0	15.9	-0.437	70.0	17.0	10.0	6.0	6.1	78.7	22	32.9
BTO											
N. Edgecombe	26.0	10.3	-0.123	86.0	10.0	3.0	10.0	< 1	89.7	15	22.6
Fairmont	29.0	6.1	0.117	82.0	10.0	4.0	2.0	8.2	77.6	18	17.5
Saint Pauls	17.0	4.8	-0.692	63.0	11.0	10.0	3.0	12.7	66.7	18	28.0
Tarboro	27.0	7.7	-0.198	69.0	13.0	12.0	8.0	7.7	75.0	21	39.0
Thomasville	25.0	11.5	-0.493	63.0	21.0	13.0	4.0	13.5	75.0	19	16.1
HP											
Jack Britt	32.0	9.6	0.082	71.0	11.0	9.0	11.0	12.5	77.9	20	24.8
Green Hope	48.0	2.6	0.327	79.0	6.0	8.0	18.0	3.2	84.0	26	18.4
Weddington	32.0	17.0	0.189	66.0	18.0	7.0	9.0	11.7	75.5	30	19.6

A final very revealing comparison among the BTO, Improved, and LP-Priority Schools concerns their ABCs designations, especially the growth component of those designations. As discussed earlier in this report, in 2004-2005 three of the five LP-Priority schools in our sample produced High Growth in EOC outcomes, and the remaining five produced Expected Growth. In other words, three of the LP-Priority Schools produced more student learning than expected in a year's worth of schooling while all of the remaining five produced as much learning as the state's accountability system requires them to produce. In terms of student learning, they met or exceeded expectations. From this point of view, it is ironic that they have been found wanting and designated "Low Performing" or "Priority" schools. It is solely on the basis of their Performance Composites that they were designated Priority Schools.

In 2005-2006, the picture changed for the worse in three of the LP-Priority schools, and for the better in one. Three failed to achieve Expected Growth, while one improved from Expected to High Growth. Many schools across the state experienced similar drops, principally because of declines resulting from the addition of EOCs in Civics & Economic and in US History, as well as a change in the way Growth is computed. One of the schools we chose as High Performing on the basis of 2004-2005 performance dropped from Expected Growth to Growth Not Achieved in 2005-2006, and in consequence received an overall No Recognition rating. So even High Performing schools were not immune.

Most of our BTO schools maintained their High Growth status, but one did slip to Expected Growth. In summary, all of the Low Performing and Priority schools in our sample produced Expected or High Growth in '04-'05. Some slipped a bit in '05-'06, as did even some High Performing high schools across the state. Over the 2 years, our Beating the Odds high schools produced High Growth in 9 out of 10 opportunities (2 years x 5 schools), and Expected Growth in the remaining one. In terms of the amount of learning produced in an academic year, the difference between the LP-Priority Schools and the BTO schools is modest but important. LP-Priority schools did an acceptable or better job with the challenging student populations they had; BTO schools did an exceptional job with similar students. All of the BTO schools achieved the status of School of Progress in both years, a significant achievement. But none achieved a higher status. This appears to reflect the difficulty of making headway with very challenging student populations within the limitations of the financial, teacher quality, and leadership resources that these schools can currently bring to bear.

One High Performing school, Jack Britt, demonstrates that with a challenging -- but moderately challenging -- student population, it was possible to do far better. In '04-'05, 46% of Britt's students came from traditionally disadvantaged ethnic groups (African-American, Hispanic, and Native American). This is clearly higher than the state average of 35% for the same groups, but substantially lower than the average of 75% for the same groups in LP-Priority schools. Britt's Free and Reduced Lunch percentage was only 22%, lower than the statewide average of 30% but twice the average for the three High Performing schools taken as a set. Reducing the minority and free/reduced lunch percentages to these levels seems to have removed the limitation on performance that affected the BTO schools. With a set of leadership practices and organizational characteristics like those of the BTO schools, Britt was able to achieve an Honor School of Excellence designation in '04-'05. And in that year, Britt's Black-White gap in performance was down to 7.7 points. The contrast between Britt and the BTO schools raises the question of

whether the BTO schools and others like them might be able to manage still higher performance if their demographic mix were more favorable.

Protocol Development and Revision

The conventional wisdom is that principals are *a* key if not *the* key to school performance. Yet most assertions about the centrality of principal leadership are vague about just what principals actually do that affects student learning. Hallinger's Principal's Instructional Management Rating Scale (PIMRS) provides much greater specificity. Drawing on much of the best available research principal leadership and student learning outcomes, Hallinger developed and validated the PIMRS in 1982 as the first instrument designed specifically to measure instructional leadership. It has been used in well over 100 studies and was recently cited by leading experts as still the best-grounded instrument for use in the field (Hallinger, 2001; Hallinger & Murphy, 1985; Leithwood&Riehl, 2003).

But our study was necessarily retrospective – we wanted to know what accounted for the difference in the performance of Beating the Odds, LP-Priority, Improved, and High Performing high schools over the five years ending in 2006. Yet neither we nor others had collected data on the instructional management behavior of these schools' principals during those years. We judged that asking the principals and teachers of the selected schools to complete the PIMRS questionnaire would be asking for a false precision. The PIMRS provided a reasonable guide for what we might ask *about*, but interviewing them about current and former leadership practices seemed more appropriate to our retrospective inquiry. Interviews would offer more opportunities to follow up on responses with probing questions, to look people in the eye, to get a sense of what people seemed relatively sure about and what seemed shaky, and also to pose open-ended questions designed to uncover aspects of the principal's leadership or other aspects of the school's functioning that might help us explain the differences in student performance across schools. Thus, we adopted the PIMRS categories of questions, but grouped and modified them to create protocols for interviews of both principals and teachers. We used the initial version of the protocols to guide interviews in the Beating the Odds schools, then revised the protocols for use in the LP-Priority, Improved, and High Performing schools.

Data Collection and Analysis

Using the interview protocol, members of the study team accompanied by doctoral students at UNC-Chapel Hill collected data in the selected schools during the months of April – June of 2007. At each of the 18 schools selected for the primary qualitative study, the team interviewed the principals for approximately one and a half hours each. From 7 to 10 teachers were interviewed individually or in small groups. Interview write-ups were composed using a template constructed from the protocol. Writeups from the several interviews were summarized in a bulleted table for each school, also structured by the categories of the protocol. The individual school summary tables then became the basis for summary tables distilling the findings for each set of schools, and a further round of debriefings resulted in a single comparative table, which formed the primary basis for report writing. A final step in the analysis involved returning to the interview write-ups to select quotations and examples to illustrate and

help elaborate each of the main points in the tables. This step also served as to assure that adequate interview evidence existed to support each point made in the Findings section below.

Findings

The Beating the Odds (BTO) and Improved high schools in our sample shared a distinctive common profile that contrasted sharply not only with the profile of the Low Performing schools but also with that of two of the High Performing schools. As suggested above, one of the three High Performing schools – Jack Britt – had a more challenging student population than the other two, and its leadership and organizational characteristics profile resembled that of the BTO and Improved schools far more closely than that of the other two High Performing schools. Thus in our findings we have incorporated the findings from Britt into our discussion of the BTO-Improved profile.

The BTO-Improved profile combined well-defined elements of both the will and the capacity to succeed with challenging student populations. In nearly all of the BTO and Improved schools, it was the principal who seemed to drive the development of both will and capacity. The will-related elements included organizational commitment, authoritative accountability leading to internalized and collective responsibility, and resilience. Capacity entailed provision of adequate opportunities and incentives for all students to learn, assured by high quality teachers using certain curricular, instructional, and assessment practices within an orderly and disciplined environment. In the sections that follow, we explain these elements and illustrate them with examples and quotations from our interviews, contrasting the BTO-Improved schools with both the Low Performing and High Performing schools as we do so.

Before going any farther, however, it is crucial to emphasize that the profile of BTO and Improved schools does not constitute a checklist of independent items, but an integrated whole with dynamic relationships among the elements. For example, the bonds of trust and attachment that link teachers with principals in BTO-Improved schools make it possible for principals to assert strong accountability pressures on teachers both individually and collectively without alienating them, depressing morale, or increasing undesirable turnover. In turn, the combination of organizational commitment and internalized responsibility seems to make for resilience in the face of adversity. Further, the resulting will to produce high student outcomes drives the implementation of key curricular, instructional, and assessment practices. Because incentives are focused primarily on student learning outcomes, curricular, instructional, and assessment practices are carried out not in a pro forma, compliance-oriented manner, but are employed mindfully and deliberately as tools in order to get results. The spirit is not, “Well I guess we gotta do these things because the Judge or the DPI or the principal said so,” but “We do these things because we are determined that these kids will learn, and doing these things in this way will produce better outcomes.” Just as the elements of will drive the way elements of capacity are built and employed, elements of capacity also strengthen the will to excel. For example, the professional learning communities that improve teacher quality and teaching also strengthen accountability. Teachers hold each other as well as themselves accountable for teaching the Standard Course of Study and producing high outcomes – so “professional accountability” reinforces the administrative accountability asserted by the principal. It is the joint action of the elements of will and capacity – not the elements in isolation -- that seems to help account for

BTO and Improved schools' success. The diagram on the following page captures this schematically.

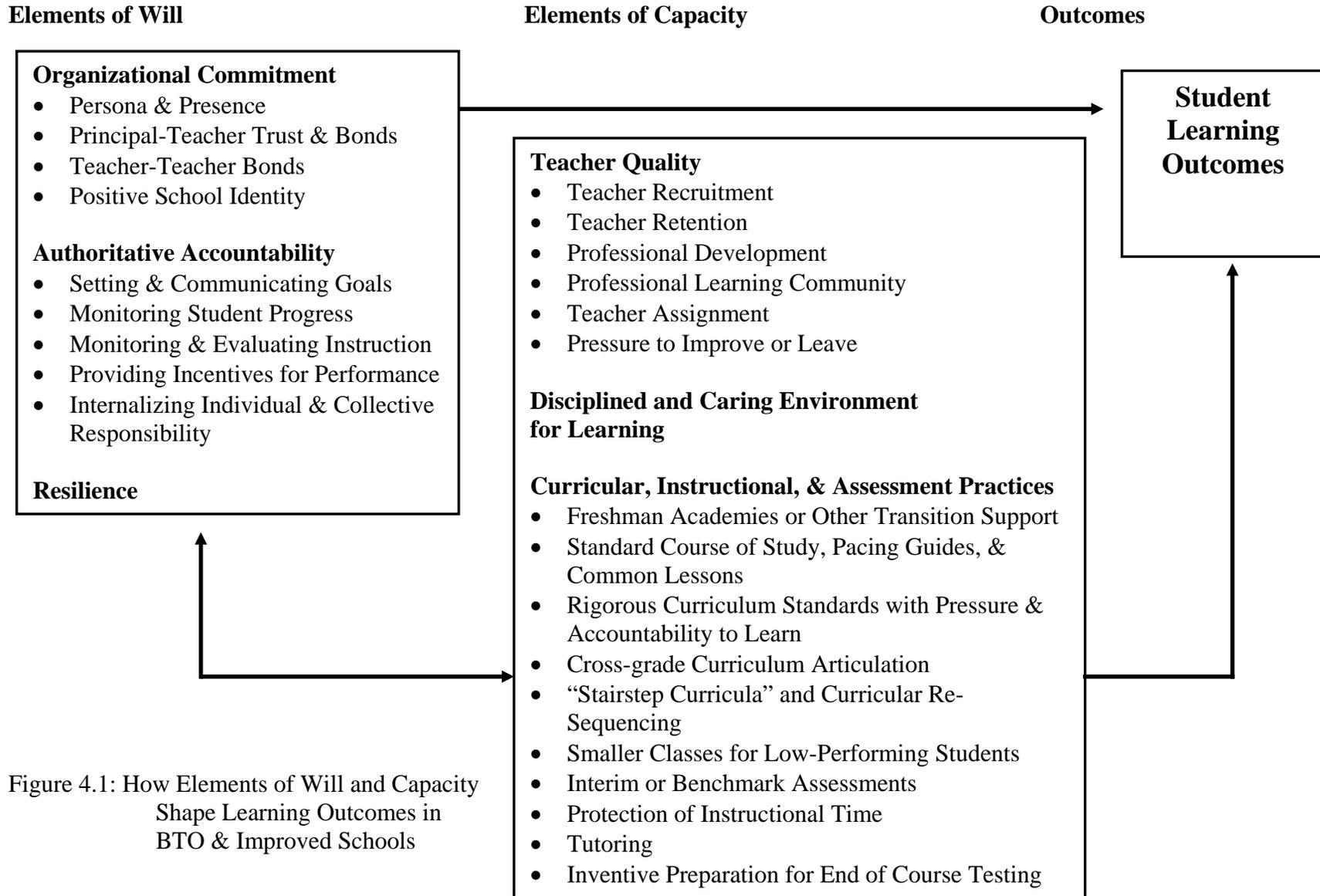


Figure 4.1: How Elements of Will and Capacity Shape Learning Outcomes in BTO & Improved Schools

The Elements of Will

As noted above, it was the principal's leadership that seemed to account in large measure for the key characteristics of Beating the Odds and Improved Schools. Of course, teachers brought motivations and strengths of their own to the schools. But this was true of all the schools in our sample. It was especially high levels of organizational commitment, sense of individual and collective responsibility for student learning outcomes, and resilience in the face of setbacks and adversity that distinguished the BTO and Improved schools from Low Performing and Priority schools. And by teachers' as well as the principals' accounts, BTO and Improved school principals deliberately cultivated these qualities through readily described behavior. Thus, in the sub-sections that follow, we describe both what principals were reported to have done as well as the resulting organizational characteristics that teachers and principals highlighted.

Organizational Commitment

Creating and maintaining the will to succeed with at-risk students in the BTO-Improved schools seems to have involved developing bonds of interpersonal as well as professional attachment between the principal and teachers and among the teachers themselves. Nearly all of the principals had established a strong positive persona and pervasive presence in their schools. They were admired and often even well-loved figures in the school. They commanded respect partly by articulating goals and a vision for the school and by maintaining high visibility in and around the school, but even more so by "walking the talk." They were trusted in several senses. Teachers believed them to be motivated by the best interests of students and the school, not their own glory or careers; found them candid and true to their word; and pictured them as competent to deliver on commitments, the exceptions being due to circumstances beyond their control. But teachers' relationships with their principals generally went beyond admiration and trust to include a personal bond. They liked their principals personally, enjoyed working with them, and even in the largest high schools, conveyed a real sense of connection with them.

In discussions among the research team, we found ourselves struck by this characteristic, which we first called "organizational attachment," emphasizing that teachers were attached to their principals, each other, and the school as an organization. They were attached not only in the sense that they expressed a devotion to the school as a place to work and a determination to remain there for the foreseeable future, but – as we shall see in the section below on *Authoritative Accountability* – they were also attached or committed to the mission and goals of the school. In the research literature, it is more often called organizational commitment (Mowday, Porter, & Steers, 1982). According to Mowday and his colleagues, organizational commitment includes "... (a) a strong belief in and acceptance of the organization's goals and value; (b) a willingness to exert considerable effort on behalf of the organization; and (c) a strong desire to maintain membership in the organization" (p. 27). With these characteristics often goes a willingness to conform to norms set by colleagues and a desire to avoid letting one's colleagues down. In a study of urban elementary and middle schools, Kushman found that organizational commitment was positively related to student achievement, as well as to teacher job satisfaction, feelings of efficacy, and expectations for student success (Kushman, 1992).

Persona and Presence. Speaking about the principal's persona and presence in their BTO and Improved schools, teachers told us, "He's everywhere." Teachers often recounted what organizational researchers call "hero stories" about their principals. They told of their principals' energetic efforts to greet and talk with every staff member at opening picnics, their inspiring and entertaining daily announcements, their frequent "drop-ins" during classes, their avid attendance at athletic, musical, and theater events, their participation in departmental meetings, their early morning arrivals and into-the-night work habits, and their concern for teachers as well as students throughout these ubiquitous appearances. At one BTO school, a teacher characterized her principal as a "big personality and ... a people person. I enjoy him as a staff person and my kids just love him. I don't think I've ever heard anything negative about him." At both BTO and Improved schools, teachers often credited the principal for the school's success: "He's taken us from the bottom where we were when he first came here." Or, "After [the principal] arrived, the whole tone just seem to change. Maybe it's the coach in her. She's a natural cheerleader."

Principal-Teacher Trust and Bonds. The BTO-Improved school principals seemed to inspire trust *in* teachers in part by communicating their own trust *of* teachers: "The teachers think that I think they are geniuses. I tell them often that they are the best faculty in the country. I want them to think that I have this unbelievable faith and trust in their ability to get kids to learn. I tell them over and over that they are the best to be found anywhere." The flip side of this praise and trust, however, is a strong sense that good performance is expected, which carries a certain amount of pressure. One of her lead teachers later said that she is determined "*not* to let [the principal] down." Explaining why she treats teachers as she does, the principal recalled, "When I first started, it was all about the students. But when I realized that without strong teaching, the students were the great losers and the school was going down the tube, 'I said, 'I've got to shift my thinking here. Because to keep my teachers, they've got to think that they're the most special people in the building.' So that's been my philosophy and it has helped. It doesn't work with everybody, especially in these huge schools where it's hard to really *know* everybody. But it has helped."

At another point in our interview, the principal recalled how she responded when her English I teachers pronounced the district's pacing guide poorly sequenced. She decided to "take a chance and just believe them," and let them develop their own pacing guide. All year long, students performed badly on the district's benchmark tests, which were keyed to the district pacing guide, and she had to endure repeated district level meetings where the school's poor results were highlighted. But she stuck with her teachers' judgment, and at the end of the year, students did very well on the End of Course assessment. "That really built trust with my English I teachers," she said. It is worth emphasizing that this principal was also a strong practitioner of data-based accountability, often laying out the assessment results for all teachers in a given team and asking what accounts for the differences in outcomes. She extends trust, sometimes in the face of countervailing evidence, but ultimately she verifies teachers' trustworthiness with data. Reconciling the competing demands of trust-building and accountability seems to require exquisite judgment about when to honor the one value and when to honor the other. Teachers confirmed her claims: "We trust [the principal] completely, and [the principal] trusts us. [The principal] will definitely hold you accountable, but she does not hold grudges." Candor also

seems to count. Asked if teachers trust the principal, another teacher said, “Highly. She calls a spade a spade. If we are not doing well, she admits it. If she does something wrong, she admits it.”

Another practice that seemed to contribute to the development of teacher-principal trust in some BTO and Improved schools was the principal’s open door policy. Teachers pointed to the policy in several schools, and in one, we saw it in action. During our hour-and-a-half interview with the principal, at least five teachers stuck their head in the door for brief conversations or to ask for an appointment for a more extended meeting. They were referred to the secretary to set an appointment, but the principal took the time to recognize each one, ask about the nature of the issue, and express a willingness to talk immediately if the issue was urgent.

Teacher-Teacher Bonds. Teachers in the BTO-Improved schools also generally respected, liked, and enjoyed working with most of their peers. We heard virtually nothing about factions, cliques, or divisions within their faculties. They communicated a sense of camaraderie and pleasure in each others’ company as well as collegueship, albeit with some sense of rivalry or competitiveness between individual teachers or among departments. Our interviewer remarked of one BTO school, “Math wants to beat science and vice versa.” As noted above, strong expectations for high performance go with the bonds between teachers and principals. A similar sense of obligation seems to go with bonds among teachers. As one teacher at a Beating the Odds school put it, “I don’t want to be the short leg on the stool.” In this as in other BTO-Improved schools, the principal’s deliberate efforts to build “professional learning communities” had clearly created or enhanced these teacher-teacher bonds. As we shall describe at greater length below (see *Professional Learning Community* under *Teacher Quality*, below) principals in BTO and Improved schools not only arranged departments’ or EOC teacher teams’ schedules to permit common planning periods but also required regular data analysis and problem-solving sessions in which teachers helped each other improve each others’ instruction. The collegial support relationships that developed from these sessions plus the fact that BTO-Improved school principals also held departments and teams jointly responsible for student outcomes (see *Authoritative Accountability*, below) appeared to foster an all-for-one and one-for-all sense of solidarity among teachers that was not evident at Low Performing schools.

Positive School Identity. Principals also deliberately cultivated a distinctive, positive identity for their schools in ways that might seem trivial if they were not clearly so important to teachers, students, and the community. The schools’ identity was cultivated and symbolized by celebrating winning sports or other teams, featuring school mascots and slogans in murals, posters, and the like, and wearing school insignias on shirts in school colors. Teachers and students seemed proud to be associated with their schools and unembarrassed to show it. Bound up with these symbolic elements of the school’s identity was a sense that it is a disciplined social and academic environment where good teachers produce high rates of student learning (see *Disciplined and Caring Environment* in *Elements of Capacity*, below).

To exemplify deliberate identity-building we would point to one Improved urban high school that had been known for years as a football powerhouse. Yet its principals had abolished pep rallies, fearing that students would get out of hand. The new principal responsible for improving

the school's academic performance saw the football team's reputation as a resource for strengthening students' pride in their school, something she could then appeal to in getting students to cooperate both in maintaining discipline and improving academic performance. She could tell them, "We are the [school mascots]. So let's don't have stories in the paper about fights or low performance at this school." The principal of another relatively new, very high-performing, high-minority school had come from an older school with an established reputation for excellence in sports. He hired a young, energetic, skilled coach who took the school to the top of its league in only three years – not for the sake of sports victories alone, but because he knew that he could use athletic success to build morale, student loyalty, and active student cooperation in disciplinary and academic terms. As we waited to interview the principal, a well-dressed man presented his business card to a receptionist. He was a football recruiter from the University of Notre Dame. At both schools, many teachers wore polo shirts in school colors and with school logos. At one, large numbers of students wore similar t-shirts provided by the school (albeit often hand-stylized with Magic Markers). Teachers at the school said, "We're winners, period." Speaking of his school's athletic success, another BTO principal remarked, "It's not what we are about, but it means a lot to our community and our kids. I support that, not at the expense of the instructional process. We've had a lot of success. The kids buy into that and I use that as a tool to help motivate kids. They have to behave and perform in the classroom or they don't play. It's not a right; it's a privilege."

Athletics were not the only route to a positive school identity. In a few BTO schools, the positive identity was built around past academic performance, which imposed expectations for continued success: "This school has been a High Growth school for 9 straight years. 10 years of High Growth? It's kind of like Lance Armstrong. After so many years of winning, you're thinking, 'He's gotta fall, he's gotta fall.' And yet he wins that race again. It's like, 10 years of High Growth would be amazing." Another principal created t-shirts that say *Property of [school name] Academics* to highlight academics instead of athletics. He also ordered certificates to recognize outstanding academic achievement or improvement. A teacher in the school remarked, "Sometimes students don't act like they care about things like certificates, but they do." To gain broad buy-in to school goals, one principal appealed not simply to teachers' self-interests but also to community and ethnic pride. "I told them, 'We want to continue getting that bonus, we want [school name] to be seen in a positive light, and *we want to dispel the myth that this predominantly Black school is just out here doing nothing.*'"

Comparisons with High Performing and LP-Priority Schools. Thus, Beating the Odds and Improved schools were characterized by high levels of faculty and administrative commitment, including strong identification with the school and its goals as well as interpersonal and professional bonds between teachers and the principal and among teachers, themselves. At the High Performing schools in our sample, teachers also took pride in the school as an organization and most said that they trusted their principals, but the sense of the faculty as a unified team rather than a set of competent individuals was not so strong as at the BTO and Improved schools. We also got the sense that the school's positive self image derived substantially from the skills and motivation that students brought to the school and to strongly supportive parents. Teachers and administrators seemed talented and hard-working, but to a substantial degree, success walked through the front door in these schools. The positive identity

came easily to them, whereas at BTO-Improved schools, a positive organizational identity was deliberately constructed and hard-won.

By contrast, teachers and administrators in our Low Performing and Priority schools were plagued by negative publicity and a bad image in the community. In one LP-Priority school, most teachers we interviewed told us that as a consequence of Leandro-related publicity they had decided to leave the school the following year. Across the LP-Priority schools teachers seemed discouraged by the criticisms and by the challenges they faced, including the poor reading and mathematics skills that students brought with them, poor support from parents, and parents' failure to discipline students and to impart a sense of the importance of education. Some pointed to these challenges as the reasons for the school's relatively poor performance. They also often felt that the school did not get credit for the things they had accomplished -- and in fact, in 2004-2005 three of the LP-Priority schools in our sample had earned High Growth designations in the state's ABCs accountability system and the remaining 5 had produced Expected Growth. In terms of promoting learning among the students who came through their doors, they were meeting or exceeding the state's expectations of them. That same year, one of our two High Performing schools produced High Growth while the other produced Expected Growth, and in the following year the latter High Performing school received a "Growth Not Achieved" designation. It is true that certain other schools facing challenges similar to those faced by the LP-Priority schools produced better academic performance, and there is much that the LP-Priority schools could learn from these BTO-Improved schools. But we would caution against branding the LP-Priority schools and the educators in them as "failures." In every school, we met several talented, energetic, and articulate teachers, and in many the same applied to administrators.

In several LP-Priority schools, new or recently re-energized leaders had begun to instill a sense of hope, commitment, and unity among teachers, but most LP-Priority schools were struggling against a history of low teacher-principal and teacher-teacher trust and against demoralization stemming from their negative images in the community and negative self-images. Like principals at BTO and Improved schools, some LP-Priority school principals recognized the need to be visible to students and reported spending the majority of their days out and around the school, especially to keep students in line. But teachers' trust in and regard for their principals was sometimes low and often spotty, reflecting strained relationships with certain departments and especially with experienced teachers. In some cases, rapid turnover among both principals and teachers had broken the bonds of support and trust. And some prior principals had tried to assert accountability (see *Authoritative Accountability*, below) without building the relationships required to maintain morale and commitment in the face of strong accountability pressures. In fact, some had berated their staffs for low performance in what teachers considered an abusive manner. In these schools teachers felt attacked and beaten down and had formed into defensive, bickering cliques rather than unified, committed teams. It was a vocational education teacher in one such school who first pointed out to us that without strong interpersonal bonds between principals and teachers, principals asserting accountability were like parents trying to control adolescents with whom they had never developed close relationships.

Authoritative Accountability

In BTO-Improved schools, teachers' admiration for and personal-professional ties with principals positioned the principals to assert accountability in a forceful way without alienating teachers. In one BTO school, it was assistant principals who pressed teachers most directly for better outcomes. Across all of the BTO and Improved schools, principals (and APs) did not simply articulate goals and plans and then explain them in a general way but held teachers specifically accountable for achieving the goals, sometimes in candid, direct, face-to-face exchanges. Both principals and teachers monitored students' progress on a regular basis, drawing on ABC scores, scores on benchmark or other interim assessments, and data on attendance, discipline, and the like. Principals' bonds with teachers provided a context in which they could lay out data on student performance, often teacher by teacher, and ask what accounted for the failures as well as the successes. The data and questions seemed to come across to teachers not as attacks but as part of an ongoing effort to build a common understanding of what was working and what was not, and to promote wider adoption of effective practices. Principals of BTO and Improved schools also made it clear to departments, teams, and sometimes the entire school that they were collectively responsible for students' learning. Teachers were credited for success in team, department, or school-wide meetings, but they were also called to account when outcomes fall short of expectations or fail to improve. Together with their assistant principals, principals of BTO-Improved schools also regularly visited classrooms to observe and evaluate instruction, and they followed through with feedback to teachers.

Setting and Communicating Goals. Speaking about her efforts to establish an overarching goal for the school, the principal of one Improved school said, "They have got to understand that the school has a goal, and whether that conflicts with their moral belief about testing doesn't really matter. This is what the state and the federal government says we are going to get to. The goal is that every student is going to achieve to the point that they are proficient and we can [accomplish that] as a whole. We can get off the bad list and onto the good list." A teacher at a BTO school rolled her eyes about the nebulous goals she heard about from friends at some other schools. "It's not about 'global competition' or a '21st century workforce,'" she groaned. "It's, 'Here are the kids we are getting. We want to see them improve this much. And everybody be focused on that.' The focus is narrow and clear. If we change something, it's to meet that same goal." In a separate interview, her principal specified targeted goals by subject area. For example, "Our writing scores were terrible last year – 36% proficient. This year we are trying to double that by emphasizing writing across the curriculum and making sure that all students who have to take the test are actually taking English in the semester when the test is given."

Through School Improvement Teams and departments, the BTO-Improved school principals involved representative teachers not only in developing plans but also in communicating them school-wide: "Department chairs present all of their data at the first School Improvement Team meeting, and then we (SIP members) had to disseminate out to the whole school what our achievement levels were for last year, what our goals are for this year, and what specific steps we plan to meet the goals for this year." But as noted above, communication of goals and plans goes well beyond the general to specific, pointed, person-to-person communication: "There is a lot of

pressure. Because we know [the principal] will call us in and we are gonna see our scores sitting in front of us, being compared to our own colleagues.” Pressure was a common theme: “Our principal focuses on one thing ... student achievement! The academic focus is a constant focus. It's push, push, push ... it influences all decisions.” Yet teachers did not seem to find the pressure oppressive. As one explained, “You want to be a part of it [the success].”

Monitoring Student Progress. Beyond the establishment and communication of goals, BTO-Improved school principals and teachers monitored students' progress toward the goals from the time they enter the school – or even before that. The principal of one small predominantly minority BTO school explained, “We take a look at what the [incoming 9th grade] students did in reading and math last year, and our goal – even though the [EOG and EOC] tests don't measure exactly the same thing – we want to make sure that all of the students have shown some growth. When the 8th grade principal gets the scores, I'm on the phone, too, telling him to send me the scores. I want to look at the scores so I can see what we have to contend with next year.”

The principal of another BTO school showed us the notebooks he keeps on the exact number of EOC Level I, II, III, and IV scores in every EOC-tested class over a period of several years. Puzzled by test score data revealing the persistence of a Black-White achievement gap in the school, he used other student data to pinpoint the causes. “I looked at all kinds of data about every single kid who had scored a I or II on an EOC – where he went to school last year, discipline history, test scores, attendance, and so on. The problem turned out to be attendance.” So he brought all of his counselors and assistant principals together, and they interviewed every student to determine what was behind the poor attendance. Sometimes it was justified – a mother had developed cancer or the parents were away and the student had to take care of younger siblings. In other cases, students said, “Mr. [Principal], school's just not my thing.” The administrators and counselors encouraged all of the students to attend more regularly, told students they would be keeping an eye on them in the future, and continued to follow them.

Another common approach to monitoring students' progress was the use of interim assessments. Teachers in all BTO and Improved schools were using some form of interim assessments – formal or informal – to guide instruction. The principal of one small BTO school told us, “We have for the past 2 years been benchmarking. This year we are doing a district-wide benchmark program. Before that we were doing kinda unofficial benchmarking. Teachers would do 6-week tests, and I would require them to mark down items – this many students missed it. They would gauge mastery based on the tally marks.” He still requires teachers to administer benchmark assessments every six weeks, but many do it more frequently – every three weeks. Both this principal and the principal of another, larger BTO school in the same district suggested that there was some tension with the district's central office over the benchmark testing, remarking that, “There's more ownership of the benchmark if it's a school level benchmark.”

The principal of the smaller school also requires progress reports every three weeks, as did some other BTO principals. “I require the teachers to print spreadsheets for me ... on Friday, based on students' grades for that three weeks.” He takes the spreadsheets home for the weekend, looking for classes with a high failure rate. Teachers are required to identify new strategies to use with

each failing student, as well as to notify their parents. Asked whether this practice might prompt teachers to simply stop giving failing grades, the principal responded that this possibility had worried him. So he began compiling lists of good strategies mentioned each 3-weeks period, and this offset the disincentive to maintain strict standards and served as a reward for good ideas and a stimulant to discussion. A teacher at another BTO school said, “We’re taking [reviewing] data the whole year. Either in a very casual sense in passing conversations or in a structured sense in faculty meetings, School Improvement Team meetings, and department chairs with departments – it’s kind of how we do what we do.”

Monitoring and Evaluating Instruction. In addition to monitoring instructional *outcomes*, BTO-Improved school principals were also directly engaged in monitoring instructional *processes*. They reported spending a major percentage of their time observing in classrooms. One BTO principal conceded that on some days he is out of the school most or all day, but claimed that, “I get into some classrooms whether I am here 5 minutes or all day.” Like other principals of BTO or Improved schools, he gave more attention and more detailed feedback to new or struggling teachers than to experienced ones. The latter received only a checklist or “walkthrough form” that he had created. Asked what he was looking for during these observations, he replied, “Something meaningful in the first 5 minutes,” clear goals and objectives, some activities involving writing, EOC review items, and instructional strategies other than lecturing or seatwork. Teachers generally confirmed principals’ claims about the frequency and nature of classroom observations. “Administrators?” one teacher said. “Oh yeah. You never know. They just walk in.” “But,” another added, “they are not out to get you. It’s not a gotcha thing.” Instead, they reported, the focus is on how to help teachers “fix things” in their instruction. Paradoxically, in one BTO school where supervisory visits were common, teachers still felt that they were trusted to do their jobs well: “He backs off and lets you do your job because he trusts you to do the job [he hired] you to do. He expects you to do your job. He doesn’t stand over us all the time and make sure we are doing the job, but he’s there if we need help.”

In BTO and Improved schools “professional learning communities” appeared to complement administrative supervision and evaluation. Teachers cannot evaluate each other formally, but frequent joint planning and some classroom observation by lead teachers or colleagues made teaching less private and individual and more subject to review by fellow professionals. (For elaboration on this point, see *Professional Learning Communities* under *Teacher Quality*, below.)

Providing Incentives for Performance. Beyond accountability pressures, the main positive incentive for teachers to produce better outcomes are the ABCs bonuses for student performance and growth. In two Improved schools, the school district supplemented these with local funds. “Monetary rewards do help,” one young teacher noted. “Before this, I had to have a second job. We also get paid extra for tutoring after school because we get paid for that, or Saturday for two or three hours.” But in BTO and Improved schools, other incentives were also at work. Principals and teachers both noted, sometimes with a touch of embarrassment or self-amusement, that competition among teachers was also a force. Teachers often added with a

quick smile that the competition is a friendly one. One said, “The teachers are competitive, and the students are getting to be competitive.”

Internalizing Individual and Collective Responsibility. In BTO and Improved schools, teacher-principal and teacher-teacher bonds combined with accountability pressures seemed to lead teachers to accept responsibility for overcoming the challenges their students presented. Both as individuals and collectively, teachers in BTO-Improved schools seemed to be animated by a sense of responsibility for their students’ learning. As one teacher put it, “Failure is not an option... if a student fails, it’s on us [teachers].” In another school a teacher told us earnestly, “You’ve got to have the guts to do the job. We want it [success] and we’ll do what it takes to get it.” In a third BTO school: “The teachers in this school do not accept excuses. Hard work is required. You may not sit quietly and just not be disruptive. A critical mass of the staff shares this attitude, especially the EOC teachers. You must work and try your best to achieve. Whether or not their parents allow excuses, we will not. It can be exhausting, but we do not accept excuses.” Their students’ weak incoming skills, insufficient motivation, impoverished fund of prior experiences to draw on in learning, lack of parental support, involvement in gangs or destructive cliques, or dim sense of the importance of education to their economic futures were facts of life or spurs to action, not excuses for failure. They communicated a conviction that students can and must learn to the students themselves in a variety of ways. They did not simply expect students to learn, but demanded that they do so, and supported their learning by using the practices described below (see *Curricular, Instructional, and Assessment Practices*, below).

Teachers in BTO and Improved schools often told us that they feel an obligation to their principal to produce high student outcomes. As one said, “I will *not* let [the principal] down.” The obligation extends as well to colleagues. A teacher in another BTO school said of his department, “I don’t want to be the short leg on the stool. I don’t want anyone to have to carry my weight. ... But at the same time I’m not upset at the other person because their scores are better than mine. It’s about me getting better, not worrying about the other person.” Another noted that, “We all monitor each other. Are you on pace? Because we are all friends. Rapport among faculty makes a big difference.” As teachers told us at the highest-scoring BTO school, “One thing that is made clear to every new teacher that comes in is that the EOC scores are the responsibility of the entire school, not just the EOC teachers.” To support EOC achievement, for example, they all give writing assignments and teach “SAT words” every week. At another BTO school, a teacher said it was not possible just to close the classroom door and coast. “You will be called on it,” she said. “We will find a way to re-motivate you. It’s not just the administrators. Teachers will not let you go on it.”

A striking example of teachers’ internalizing responsibility for student outcomes – indeed, internalizing principals’ use of comparative data to motivate and guide improvement – was provided by a social studies teacher at one large BTO school: “I pull all my students’ scores in every one of their classes, especially their EOC classes. I want to know if someone is being more successful than me [with a particular student]. Then I go and find out what they [the other teachers] are doing that I am not.” The principal of one BTO school made a telling point about the relationship between teachers’ expectations of students and their expectations of themselves. “Even some of the worst teachers have high expectations of their students. They expect the

students to learn no matter how bad their class is. They expect kids to do their homework no matter how bad their lesson is. What's the [key] variable then? The expectations that teachers have of themselves.”

In Improved schools, the sense of responsibility for student outcomes seems to lead to small initial successes, and these appear to lift teachers' expectations further. In other words, accountability seems to demand improvements in instruction, the improvements in instruction produce better outcomes, the better outcomes elevate expectations, and so on in a slow upward spiral. Small initial successes set off a spiral of rising expectations and changes in teachers' behavior.

Comparisons with High Performing and LP-Priority Schools. In BTO and Improved schools, then, the organizational commitment that principals built positioned them to set clear, limited goals and communicate them in a direct, person-to-person fashion without alienating teachers. They generally engaged teachers in goal-setting and developing plans to achieve the goals, but with strong principal-teacher bonds and reasonably broad buy-in to the goals and plans, they did not hesitate to put pressure on teachers to produce high performance – even to put individual teachers on the spot by comparing the student scores they produced with those produced by other teachers with similar students. They tracked students' performance on an ongoing basis, and they monitored classroom instruction directly, as well. They used such financial incentives as they could muster, including ABCs and local bonuses, but they were not above fostering friendly competition as an additional performance incentive. The combination of bonds, buy-in, and pressures seemed to encourage teachers to take responsibility for their students' performance, no matter what background challenges students brought with them to school.

Paradoxically, at one of our High Performing schools, the principal made a point of not communicating his goals to teachers, on the premise that teachers should set their own goals out of strong intrinsic motivation and knowledge of their students. Yet at this and the other High Performing school, principals were clearly alert to EOC data about the school's and individual teachers' performance. The HP principal who deliberately kept his own goals to himself still shared every teacher's EOC results with all teachers school-wide. At one of the HP schools, parents could track their own children's ongoing test and homework performance on the school's website. Both HP principals did use data to track students' progress, but seemed to pay at least as much attention to SAT and AP scores as to EOC scores. High scores on the latter were largely taken for granted. In fact, there seemed to be some complacency about high EOC performance among teachers at the HP schools. The HP principals seemed to do less classroom observation than the BTO-Improved school principals, largely restricting themselves to required observations of Initially Licensed Teachers and experienced teachers due for observations on the three year cycle set by state policy.

At Low Performing and Priority schools, we heard of a new emphasis on EOC scores and improving performance, but the principals seemed to be working against long traditions of relatively low expectations that they had not yet been able to break through. The principal's and School Improvement Team's goals were sometimes well-specified in widely-shared School

Improvement plans, but buy-in among teachers was not uniform across the school, and without strong teacher-principal bonds, principals had limited leverage to assert strong accountability on a day-to-day, teacher-by-teacher basis. In fact, several principals were reluctant to pressure teachers for better results because they faced such difficulties in recruiting and keeping qualified teachers (see *Teacher Quality*, below).

Some LP-Priority schools had seen a recent sharp increase in classroom observation. In one case teachers attributed this to pressure from a DPI representative who visits the school regularly, and in most schools the increased frequency of observations appeared to stem from outside pressures and recent training. In one High Growth Priority school teachers were required to submit lesson plans on a weekly basis. In most LP-Priority schools, benchmark testing appeared to be carried out in a rather pro forma manner rather than with determination to identify struggling students and assure that all of them make the grade. In these schools we were also more likely to hear that, “Tests do not measure everything about a student – their growth as a person, all that they know, and where they have come from.” Yet in the High Growth LP-Priority school just mentioned, teachers were required to pre- and post-test students weekly, as well as to submit Personal Education Plans on all students, not just those in danger of failing. One district offered a small bonus to attract teachers to LP-Priority schools, but we heard little about district-sponsored performance incentives. Nor about individual or departmental teacher-teacher competition.

While in all schools we met several teachers who took responsibility for student learning and worked hard (sometimes to exhaustion) to improve performance, in LP-Priority schools we also heard so much about students’ poor entering skills, low motivation, lack of understanding about the importance of education, and poor support from parents that it was difficult to escape the sense that many teachers were placing the responsibility for poor performance largely on students and their families rather than on themselves and the school. Apparently with some justification, teachers in one district complained that the district’s choice-oriented student assignment policies sent disproportionate numbers of low-income and minority students to their school, placing them at an unfair competitive disadvantage. Except for complaints about student assignment policies, in BTO and Improved schools we heard similar descriptions of the challenges involved in motivating and educating students, but the challenges seemed to be spurs to action rather than justifications for poor performance. It was a matter of the attitude that administrators and teachers took toward the challenges rather than whether the challenges were present. Teachers in BTO-Improved schools expressed great confidence that they could get their students to learn and perform acceptably despite the challenges. This attitude appeared to result not simply from high expectations held by individual teachers, but from experience in getting good results under steady pressure and support to produce them. If there was a “culture” of high expectations, the culture apparently had not sprung up spontaneously, but developed in the context of strong principal leadership in the sense sketched above.

Resilience

In BTO and Improved schools, principals’ and teachers’ attachment to each other and to their schools along with their acceptance of responsibility for meeting the challenges that students

brought to the school seemed to engender a certain resilience in the face of discouraging circumstances and setbacks. BTO-Improved schools had sometimes lost high-performing teachers, undergone a change in student population, seen EOC scores drop when a new version of an assessment was adopted, or suffered other setbacks, but they did so without losing hope. They acknowledged and bemoaned the loss, but soon pulled up their socks and got back to work. In contrast, LP and Priority schools seemed demoralized by community and press criticism and by a long history of losses and perceived failures. They were sometimes very hard hit by the loss of good teachers. One LP-Priority principal pointed to a 49 percentage point decline in a science EOC passing rate precipitated by the loss of a long-time teacher in the school. LP-Priority principals and teachers were also especially sensitive to the effects of changes in EOC examinations and cut scores, a sensitivity that was not unknown but not so discouraging in BTO-Improved schools. High Performing schools seemed seldom if ever tested by such losses and setbacks.

The Elements of Capacity

Before plunging into a discussion of the specific elements of capacity that distinguished BTO and Improved schools from LP-Priority and from High Performing schools, we want to emphasize two points. First, that principals generally played a central role in cultivating the elements of both will and capacity that make up BTO and Improved schools' distinctive profile. It goes without saying that they could have accomplished nothing without the active engagement of talented teachers, and we found impressive teachers in all schools, but the distinctive edge that BTO and Improved schools showed in terms of academic performance owed a great deal to active interventions by their principals.

Second, that it was the dynamic interactions of the elements of will and capacity that appeared to result in better results, not simply the presence of the elements as individual items in a checklist. For example, teachers in BTO and Improved schools seemed to carry out the curricular, instructional, and assessment practices described below with a determination to get results that stemmed in part from principals' authoritative assertion of accountability for academic outcomes (see *Key Curricular, Instructional, and Assessment Practices*, below). Similarly, the professional learning communities described below gave rise to what we have called professional accountability -- teachers holding themselves and their colleagues accountable -- which complemented the administrative accountability asserted by the principal (see *Professional Learning Community* in the section on *Teacher Quality*, below).

A third point concerns the distinction between what might be called potential teacher quality and effective teacher quality, or between *teacher* quality and *teaching* quality. Ultimately, it is the quality of the actual instruction that students get in the classroom that shapes what they learn. Teachers' preparation, continuing education, formal and informal professional development, and experience combine with other factors to determine their potential performance at a given time -- the knowledge, skills, and dispositions that they bring into the classroom -- but some schools appear to get more out of their teachers than do other schools. BTO and Improved schools appear to recruit and retain qualified teachers, strengthen their skills via formal and informal professional development, and motivate them to translate more of their potential into high quality

teaching than do LP-Priority schools, but at this point, we cannot separate out the relative contributions of incoming skills, professional learning, and motivation for peak performance.

Teacher Quality

As part of our interview process in BTO schools, we asked principals about specific rises or drops in the percentage of students proficient in particular EOC-tested subjects. The most common explanation was the gain or loss of an outstanding teacher. Not surprisingly, then, principals of BTO-Improved schools were active, selective, and persuasive recruiters. They did not simply accept the teachers they were sent, but sought out good candidates on the web, at job fairs, and – it seemed – everywhere they went. In some cases, bonuses helped them recruit, but principals said and teachers confirmed that it was the image of the school as a work environment and the quality of their prospective colleagues that clinched the deal. Once the principal had primed the recruiting pump, the school’s reputation and teachers’ word-of-mouth networks seemed to attract many good candidates, thus allowing principals to be more and more selective in hiring teachers – and in keeping them. The principals were reluctant to give up on teachers performing below par and worked actively to help them improve, but if a teacher continued to be ineffective, the principals put him on an action plan and suggested that he might be happier in another school. Turnover rates in these schools were generally low, but the principals held that some teacher turnover was desirable teacher turnover. The same factors that attracted teachers to the BTO-Improved schools – an engaged, supportive principal, a good working environment, and good colleagues -- seemed to keep them there.

Teacher Recruitment. For both BTO and Improved schools, bonuses and pay supplements were not negligible factors in teacher recruitment. “I can’t say enough about the Leandro [Disadvantaged Student Supplemental Fund] money” for teacher recruitment and retention, one principal told us. He used the funds not only for signing and retention bonuses but also to pay for small rewards, such as snacks at meetings, jackets in school colors for all faculty, or flowers and a balloon for a newly National Board Certified teacher. “Little things mean a lot to teachers,” he explained. The principal of a large urban Improved school also noted that her teachers received local bonuses of \$1,500 as well as bonuses for growth under the ABCs program. “I like merit bonuses,” she said. Yet explaining that “somebody can always outbid you,” one principal said that in recruiting teachers, he appeals to “missionary zeal.” It was clear that many teachers in BTO and Improved schools were motivated primarily by a drive to see that low income and minority students get a better education.

Explaining how he gets a competitive edge despite the small size and remote location of his BTO school, the principal of a predominantly African-American BTO school told us, “Basically, it’s about timing. Whenever I have an opening, I check [the DPI online application website] multiple times during the day, and I try to be the first person to call.... I describe the school, and I talk about my leadership style.... I tell them we are 90% minority, 79% Free or Reduced Lunch, and if you don’t have some experience working with these populations or a strong desire to work with these populations, then this is not the place for you. I tell them that I reserve the right to make all decisions, but 9 times out of 10 I am gonna give you that ... decision making power. [Then,] I don’t do telephone interviews. You have to come in person. I don’t care where

you live – in California or in Raleigh.” Especially in small towns and rural areas, BTO principals often preferred hiring teachers from the local area, on the theory that they would understand the students’ culture better and be more likely to stay in the school. But this particular BTO principal said that in the previous year, he had sought out teachers from sharply different ethnic and geographic backgrounds in order to offset what was beginning to feel like an ingrown environment.

The principal of one large Improved school brought in a dozen teachers from a high school that she had turned around earlier. Although they were only 12 teachers out of a faculty of about 170, “they made a huge impact. I only brought the best. People that I knew would help change the climate.” She reported that after a rocky first year when she had to hire 40 new teachers in all, the number of new hires was down to 15 in her second year. She noted that, “You gotta be real careful because of the sense of panic. The district goals are, ‘Let’s fill all the vacancies by the end of May.’” She interviews all prospective hires individually, but they are also interviewed by groups of teachers within each department. Because the district has screened candidates’ qualifications, she can look more for personal qualities. “The first thing I look for is energy and eagerness. People who really believe that the kids can do well. Not just people who are looking for a job.” She prefers not to hire lateral entry teachers and does not do so without subjecting them to special scrutiny to determine whether they are really dedicated to teaching, able to accept constructive criticism, and have “curriculum knowledge that I don’t have to question.” She also looks for people who can work in teams, “not just close the classroom door.”

The principal of a large BTO high school said, “Teachers like it here, and they do a lot of recruiting for me. They talk to other teachers, tell them what a great place it is. Once you have earned that reputation...” recruiting is not a problem.

Teacher Retention. The quote in the section on Organizational Commitment above about giving teachers the sense that “they’re the most special people in the building” reflects one reason that good teachers seem to stay in BTO and Improved schools. Another factor that seems to help keep good teachers is the degree to which they feel supported in more concrete ways. As one principal explained, “I tell them I don’t care what you need in order to teach – I don’t care if it is some kind of wild-striped pencil – we are getting it.” In another large BTO school, the principal spoke about the teachers whom each of his assistant principals were responsible for “taking care of.” This included supervising instruction in their classrooms, but also prominently included helping them to handle student discipline and other problems, as well. Assignments of teachers to APs were made through a process that the principal compared to a National Football League draft. The principal and APs went through multiple rounds of choosing teachers to “take care of,” with the low-maintenance teachers going high in the draft and those who required more support being “drafted” later on. This process resulted in a reasonably even distribution of low- and high-maintenance teachers across the set of administrators, so that no administrator was so overburdened with problems that he or she could not respond promptly to requests for help. He surveys teachers annually concerning the quality of support they are getting from him and from his APs. “We use the results as a learning tool to help us do better,” he said.

The principals of BTO and Improved schools did seem to differ from one to another in their philosophies about “backing teachers up” in situations involving student discipline complaints from parents. One said, “Teachers expect you to back them up. If a teacher writes up a student, and a teacher needs help with discipline, you’d better be there. The teachers know we are gonna believe their account unless something slaps us in the face that something is wrong [with it].” Another principal said he makes it clear to teachers that, “If you are in the wrong, I am not going to back you up. If you are wrong, just admit that you messed up. Parents can accept that.”

BTO-Improved school principals all took active steps to make it fun to teach in their schools. “I do everything I can to take away all of the nonsense that makes teaching not fun, because Lord knows, there are times in the classroom that they are having a hard time. I give Crystal Apple awards. Let them wear jeans and [school logo] staff shirts on Friday. People will die to wear a pair of jeans.”

Another type of “support” that was important to teachers was permission to restructure the curriculum. Mathematics teachers at one Improved school proposed re-sequencing courses from Algebra I-Geometry-Algebra II to Algebra I-Algebra II-Geometry to improve curricular continuity and thus improve student outcomes. Their principal approved the change, and the teachers cited this development as evidence that “she gives us a lot of freedom and trust.” They went on to note, “But she holds us responsible for results,” and they experienced the combination of trust and accountability as indicating that the principal “treats us with respect as professionals.”

Professional Development. In addition to recruiting and keeping good teachers, BTO principals also worked to strengthen the teachers they had. Most teachers said that the professional development experiences that the school or district made available on a routine basis varied greatly in quality, but principals brought certain PD activities right into the school, and teachers often confirmed the value of these, sometimes enthusiastically. Some principals were more selective, restricting the range to a few activities keyed to their improvement priorities.

Asked about professional development, one BTO principal replied, “That has been rough. The state allotment for professional development just has not been adequate. So the Leandro [Disadvantaged Student Supplemental Fund] funds have been great.” He described working with his School Improvement Team to review test scores, grade distribution report forms, discipline reports, and other data to focus professional development more narrowly. In ’05-’06, they emphasized improving English I scores. He found the DPI’s state subject matter conferences especially valuable. “That is where you get to hear from the people who are doing it right. One thing that Judge Manning tells us is that we better go see what the people who are doing it right are doing. So that’s our first line of defense.” He has followed up on the conference by bringing teachers “who are doing it right” into the school for PD sessions in English and US History. This practice might be viewed as a way of extending professional learning communities (PLCs, see below) through networks that linking the school to PLCs in other schools. Principals and teachers at several other BTO and Improved schools also found the NCDPI subject matter conferences valuable. By contrast, most district-organized PD was

regarded as a waste of time. The exception was one county's "Creating Great Classrooms." Principals and teachers at several schools gave modules offered by the Teacher Academy high marks, especially for new teachers.

The principal of one Improved urban school singled out two specific professional development offerings that contributed to rising performance: Max Reading Strategies (<http://maxteaching.com>) and PEAK instructional strategies (<http://peaklearn.com/peakteam.html>). She described Max Reading Strategies as "very, very prescriptive," meaning that the strategies are specified in great detail, so that teachers in all curricular areas – teachers with little or no background in reading instruction – can grasp the strategies with only modest training and use them to improve students' ability to read texts in their subject areas. The PEAK instructional strategies helped teachers engage a broader range of students more actively in learning course content.

Several principals of BTO and Improved schools viewed mentorship as a form of one-on-one professional development. The principal of our highest-performing BTO school hired an outstanding retired teacher to observe and coach struggling teachers -- mainly but not exclusively initially licensed and lateral entry teachers. To illustrate the mentor's sense of obligation to provide genuinely effective help, the principal recalled the time when she failed to improve one experienced teacher's performance and insisted on writing the school a check for the costs of the time she had spent working with that teacher.

As indicated above, BTO-Improved school principals and their APs observe instruction on a regular basis, many using brief "pop-ins" or "walkthroughs" in nearly all classrooms in addition to the required evaluations of new teachers and experienced teachers in the fifth year of a cycle. When administrators followed up with specific feedback, observations sometimes served as instruments of instructional improvement, not solely as instruments of accountability. The principal of one mid-sized, heavily-minority BTO school told us that he often conducts unannounced observations, most frequently of "struggling" teachers. A teacher confirmed the practice: "He'll walk into your room five, ten minutes before the bell rings on a Friday to make sure you're still going. He'll say, 'glad to see you're still working' or 'glad to see you know when the school day's over.' If the kids aren't doing what they're supposed to, the teacher's not doing what she's supposed to. He looks to see that your kids are engaged . . . he should be able to learn something too [when he visits a classroom]. When they [students] walk in our rooms, they never ask, 'what are we doing today' cause it's right there on the board every day, and they come in and get started." Asked what principals were looking for in their observations, teachers across BTO and Improved schools also mentioned use of the Standard Course of Study and pacing guides, whether teachers were working from well-crafted lesson plans, use of materials and resources, and use of multiple teaching approaches, not just lectures and seatwork.

Professional Learning Community. Teachers were much more enthusiastic about advice from other teachers than about advice or critiques from administrators. Principals of BTO-Improved schools may not have used the term "professional learning community," but they promoted the development of professional learning communities (PLCs) – often quite aggressively. A few simply arranged common planning times for teachers of a given course, but

most went well beyond this to charge EOC teams or departments with collective responsibility for improving student outcomes. They made it plain that if one teacher fell down on the job, all would be held responsible. Some principals named a lead teacher to organize team or department meetings, submit reports on the meetings, observe in others' classrooms, and take other steps to pinpoint problems and help their colleagues address them. Some also met with the teams on a periodic basis to review data on students' progress – sometimes at the individual student level. Professional learning communities did not simply spring up in these schools, but was virtually mandated. Teachers reported that no one could simply disappear behind the classroom door. If teaching was not always public – and administrator or peer observation often made it so – then test score results certainly were. Within PLCs, norms of good practice arose and were enforced. In this sense, collegial accountability reinforced the administrative accountability discussed above. But by helping teachers deal with knotty problems of classroom practice, PLCs helped to build capacity as well as to enhance motivation. Principals in BTO-Improved schools held teachers responsible for outcomes, but worked with them and allowed them considerable flexibility to develop and implement more effective approaches and materials.

One small BTO school had brought the percentage of students proficient in Geometry up from 38% in '03-'04 to 79% in '05-'06. The principal explained that he had pressed the mathematics teachers to work together more closely. Now, he said, "The math department is awesome. They work the most together and with me. They come down and say, 'I have this idea. What do you think about this?'" All of these jumps stem from my willingness to allow them flexibility, to come up with ideas," and then to get the go-ahead from the principal.

Noting that she hires people in part for their ability to work in teams, the principal of one large BTO school explained, "Because I *require* some strict planning together. All teachers of an EOC course have planning time together," and are required to give the principal a schedule of all meetings, develop common lesson plans for each week, and submit minutes of each meeting. "If you don't monitor it [planning], it's not done." She went on to say that, "The most important PD is the PD we do here – what we do to make a difference in kids' learning and test scores. [In team planning meetings] we have to teach each other what the test scores mean, how we can use them to divide kids up for instruction and so on. Not on-paper PD but daily PD as in, 'How are we going to put this lesson together?' Or like in math, they will give the same five-question test, and they will bring the test results back, and examine which items the kids got right and which ones they got wrong, and if they got it wrong, what answer they put down. We break it way down, and I consider that professional development."

As indicated earlier, principals' use of data to assert individual teacher and group responsibility for outcomes often provides the occasion for teachers to learn from each other. As one lead teacher put it, "[The principal] has high expectations for all of us. She meets with our team. She will ask, 'What are you *not* doing that so-and-so *is* doing, and why are your scores not as high?' But this is a genuinely analytical question. "It's not just to put you on the spot. It does put you on the spot, but not just that. The question is what can you do with these regular kids that X is doing with these regular kids?" Fortright comparisons of scores of teachers teaching similar students followed by questions about "what is going on here" and efforts to help were common practice for principals of BTO and Improved schools. According to teachers, the interchanges

are motivating, but they also elicit colleagues' suggestions about specific techniques to improve instruction. As one explained, "The teachers here really work together to make sure that everyone is successful. They are not going to laugh at you if your test scores are low. Instead [the teachers in your department] are going to say, 'Where did you have trouble? Let's work on that. Here are some of the things that I do. Let's see if that will help.'"

Another form that professional learning communities take in several BTO and Improved schools is support groups for teachers pursuing National Board Certification -- groups commonly organized by teachers who have already achieved certification. On average, 6% of the teachers in the BTO and Improved schools were National Board Certified, but in one small BTO school, almost 11% were NBCTs. The average for Low Performing schools in our sample was just under 5%. Statewide, the NBCT figures are about 12% for high schools in the top quartile of Performance Composites, but about 5% for schools in the bottom quartile.

Teacher Assignment. In addition to recruiting strong teachers and promoting further development through formal PD and professional learning communities, principals in BTO schools also assigned teachers strategically, often asking and providing incentives for strong, experienced teachers to teach some "regular" or lower-ability classes, not all Honors and AP classes. They gave some play to teachers' preferences in an effort to maintain motivation and commitment, but did not hesitate to press teachers to take some classes with more challenging students. They also tended to assign their most effective teachers to teach EOC-tested subjects. "If I am held accountable," one principal explained, "I am going to have my best people teaching them. That is the challenging part about the whole thing. In a school my size, 9 teachers decide the PR that the whole school gets. Those teachers decide what happens." By "PR," the principal referred to the way the school would be portrayed in the local media, based on the ABCs designation it has received. Offsetting the pressures was the strong sense that, as teachers in another BTO school told us, "Getting the bigger classes or the EOC classes is compliment. You have to prove yourself if you want to teach an EOC class."

The relatively new principal at one small BTO school told us, "I had to move teachers out of their comfort zones. Some people had been teaching the same thing at the same level for years. I had to take a look at the data and see what teachers were doing the best with what group of students and move those teachers around according to those statistics." He cited as an example a teacher who had been teaching virtually all seniors for many years, but seemed to have the firmness and fairness to push less motivated students to succeed. So he assigned her to teach a 9th grade EOC-tested course. She was reluctant at first, but succeeded beyond her own expectations. "So she came to me this year and said, 'I'm willing to do whatever you need for me to do.'"

The principal of one large Improved school spoke of "putting the teachers that are really powerful people where it matters most." She stressed that she does not believe in assigning teachers based on seniority -- "the best teachers are in the EOCs. And if you think you are gonna be a lead anything, or a department chair, because you've got 35 years, then you better have some test scores. Because you are not gonna be the leader if you can't produce the results." Asked about the distribution of Honors versus "regular" sections within EOC courses, the

principal replied, “I like to mix it up a bit.” She explained that while it is important to have the best teachers teaching some regular sections, giving any teacher all low-performing students can undermine their sense of efficacy, their sense that they can get results “without pulling eye teeth.” Like other principals of Improved and BTO schools, she said, “I try to honor at least one of [their expressed preferences].” Even one lead teacher with close ties to the principal told us, “If [the principal] said, ‘You’re teaching all of these Level I students next year, I don’t think I’d stay. I do teach one regular class ... and they are very low.’”

Pressure to Improve or Leave. Finally, principals at BTO and Improved schools were willing, if necessary, to put strong pressure on poor performers to improve sharply or find another job: “You try not to have too many teachers that are bad, but if they are bad, I put ‘em on an action plan and try to make ‘em get better.” One principal explained that his school’s high turnover rate in the previous year was the result of his deliberate effort to “push out some bad teachers.” Another recalled, “I had some teachers who decided this [environment of pressure for performance] was not for them. I had told them, ‘If you ever get to the point where you think this is not for you, I would rather you would find someplace else to teach.’ And some have.” Yet the principals in these schools were not quick to judge teachers. A typical BTO principal said that he insists on knowing the details of Assistant Principals’ work with struggling teachers before taking action to force them out: “What exactly have you done to correct the problem? What have you done to help Mr. Smith get better? Do not just give up on a teacher. Do everything you can to help.”

Comparisons with High Performing and LP-Priority Schools. Like BTO schools, our two High Performing schools reported little difficulty in recruiting and retaining good teachers. Principals said their schools’ reputations and word-of-mouth advertising by teachers did most of the work for them. Highly motivated and well-behaved students as well as supportive parents, many of whom volunteer in the schools, appeared to help keep as well as attract teachers to these schools. At one, all teachers teach both upper (AP, Honors) and lower level (“regular”) classes. At the other HP school, the principal made all assignments unilaterally, and teachers who failed to produce high scores in AP and Honors classes were reassigned to teach “regular” classes. This had clearly angered some teachers, but their anger had no discernible effect on the principal, and few had left the school for this reason. There was no common pattern of professional development or professional learning communities across the two schools. One emphasized professional development for AP classes and SATs, participation in the SACS accreditation team as a learning experience, district-led content area PD sessions, and visits to three other high performing schools that are bettering its own performance in some area. The same school had no formal faculty meetings at all, and teachers expressed concern about the lack of “teamwork” in the school. The other HP school had a history of strong professional learning communities dating to its inception, but made little mention of formal professional development.

Principals at LP-Priority schools generally reported great difficulty in recruiting and retaining teachers. As indicated earlier, we met articulate, energetic teachers in all schools. But in rural LP-Priority schools principals said that low local supplements and communities without adequate housing and with few cultural amenities made it extremely difficult to recruit and keep teachers who were not attached to the area because they grew up there or had a spouse from or

employed in the area. In urban areas, some principals and teachers said that their schools had traditionally gotten the “leftovers” from schools with better reputations. Principals emphasized that publicity about their school’s appearance on Judge Manning’s list of perennially low performing schools made teacher recruitment much more difficult. One district offered \$1,000 bonuses to teach at challenging schools, but principals said the bonuses had attracted few teachers. Teachers were seldom involved in the recruitment and selection of new teachers. LP-Priority schools employed substantially more teachers with temporary, emergency, or provisional licenses, more lateral entry teachers, and more long term substitutes than did BTO-Improved or HP schools. Teachers themselves said that low faculty morale, enmity between cliques, and a lack of support from their principals and colleagues drove many teachers away after a year or two. The sense of distrust and outright hostility was palpable in some LP-Priority schools. In one, some teachers declined to be interviewed by our team (participation in the study was voluntary), and in the same school, the principal declined our request to record the interview so that we could make fuller notes from the recording. In two LP-Priority schools, we were unable to gain entry to do interviews despite more than twenty email and telephone efforts to do so. Partly as a result of the negative publicity and pressures on these schools over the past several years, trust had been eroded to a nub.

Not surprisingly, then, collegial professional learning communities had been rare. Yet most LP-Priority school principals had recently attended workshops on the benefits of PLCs and how to establish them, most seemed enthusiastic about the possibilities, and had initiated efforts to build PLCs. One lateral entry vocational teacher expressed a real longing for helpful colleagues, but said that he and another lateral entry vocational teacher generally found themselves pooling only their own limited experience. He noted that a critical mass of experienced colleagues would be required to make professional learning communities effective. LP-Priority school teachers generally told us that school-site PD was “drive-by,” unfocused, shallow, and sometimes contradictory (that is, the advice offered in one workshop contradicted the advice offered in another). In one school where PD had been more programmatically organized, after-school PD sessions were sparsely attended even when nominally “required,” and even though they were supported by a Comprehensive School Reform grant. On the whole, we heard little about CSR or Gates Foundation grants, and when we did hear about the latter, implementation was either still in the future or too new to have exerted any discernible effect. In one LP-Priority school, the district had introduced instructional coaches in content areas, and their instructional monitoring, observations, feedback, and help in using assessment data were seen as very valuable.

Teachers generally reported that they had no opportunity to influence what courses they would teach, and in some schools they learned of their assignments only a day or so before school begins. In one LP-Priority school where improvements seemed to be stirring, the new principal noted that she now assigns the teachers who are getting the best results to teach EOC courses.

Finally, as indicated earlier, principals of LP-Priority schools were sometimes very frank about the dilemma that their recruiting and retention problems posed when it came to dealing with low performing or recalcitrant teachers. One said that he had recently begun to confront teachers more aggressively, but worried that the new pressures might drive them out of the school,

leaving him with no alternative but to hire a long term substitute as a replacement. “Before accountability,” he said, “this was a very attractive place to teach.” Parents of children who made good grades had little cause for complaint, and parents of children who did badly were seldom disposed to do so. In this school, reports not only from the principal but also from several teachers pointed to a sharp divide between many experienced teachers who resented the new accountability and younger teachers who seemed to take it for granted.

Disciplined and Caring Environment for Learning

The principal and teachers in BTO-Improved schools take a proactive approach to establishing norms of order and discipline in the school. The culture of many high schools is the product of a tacit bargain or balance between the preferences of adults and students, but in these schools it is clearly the adults who set boundaries on behavior and control the culture of the school. Yet the environments do not feel hostile or punitive. The teachers claim to know and profess to like their students, and our limited observation bore this out.

The principal and teachers at our highest-scoring BTO high school stressed the importance of setting norms for behavior from the moment students enter the school each day. They stand at the door and in the halls, greet as many students as possible as they enter, watch closely for infractions of the rules on dress and behavior, and politely address infractions. According to one teacher, “Visible, Vigilant, and Vocal” is the motto, and when rules are set down, “They are *enforced. Without question.*” No hats, do-rags, t-shirts with questionable slogans, low-cut tank tops, exposed midriffs or boxers, short shorts, or other inappropriate dress were permitted. Another teacher said she just smiles, taps her head meaningfully, and boys quickly pocket their do-rags. As a sign that students and teachers have close relationships despite the tight discipline policies, one teacher said of African-American students, “They usually call us ‘White Mama.’”

The principal of a huge Improved urban high school reported a similar approach to creating a disciplined environment for learning: “The kids can run over you. In two days the whole school can [fall apart]. You know, we’ve got gang people in here. I track them. I know who they are personally. I try my best to befriend them in some way. But I tell them to take their [gang quarrels] out of this building. These are brilliant people. I bet their IQs are 150, but they are *bad*. They know how to survive and how to recruit, because they attract so many people. So every time somebody tries to enroll here, we have to take a close look at them.” And because of this threat, “I’m very strict with discipline. We’re gonna dress like we are coming to school, not having a hat on our head, not seeing anything remotely connected to a gang, nothing. *Nothing*. Not gonna have any vulgarity. When there are infractions, we automatically follow the code of conduct. I am not getting into any discussions. I don’t have time for that. We suspend these people. And then we bring them back. That [process of establishing limits on students’ behavior] takes about a year.” In a small city, a BTO principal told us, “School is for learning. If you intend to disrupt, you will leave.”

Principals of BTO and Improved schools routinely reported that they get out around the schools during key stretches of the school day, particularly at the beginning and end of the day and during lunch periods. “The kids need to see you,” one said. “They need to know that you are in

the building.” At a sizable BTO school located in a small city, teachers attributed the disciplined environment to the visibility and active interventions of administrators: “They are not in their offices. The school is a safe environment and they are a part of the reason.”

Speaking about the need to combine strong discipline with caring relationships with students, one young African-American principal told us, “This may come as a surprise, but I am very tough. But the students know that I love them to death. I get on the bus, and I ride with them to every game. Even though my girls are not doing well now, they expect to see me there.... I go to the churches, go to a different church every Sunday. They call me the funeral buzzard. I am always going to a funeral. Because I tell the kids, ‘If you’ve heard, I’ve heard.’ I live in [nearby town], but I come to [this area] to WalMart ... because I see my kids [here].” The school is small enough to have a “family oriented atmosphere,” and that is “the major reason why we have done as well as we have.” At another, much larger school, teachers also spoke of their personal relationships with students: “They ask me, ‘Are you coming to the game tonight?’ The next day, they tell me, ‘I saw you at the game last night.’”

Comparisons with High Performing and LP-Priority Schools. The environments at HP schools seemed just as well-disciplined as those at BTO and Improved schools, but we got the strong sense that this owed much to parents’ firm hand at home and presence at school. Teachers’ and administrators’ relationships with students – and with their parents – also seemed equally positive as those in BTO-Improved schools. It is worth noting that both of the schools with HP profiles were in affluent suburban-exurban areas.

In no school did our interviewers get a sense that students were often disorderly, violent, or even rude. We did see some evidence of misbehavior, but nothing that would surprise anyone who ever went to an American high school. In one LP-Priority school, for example, two students were standing in the hall outside a classroom, and they smiled with some embarrassment when we passed. It turned out that they had been sent out into the hall by their teacher, whom we later heard upbraiding them before readmitting them to class. At a huge urban BTO school that seemed remarkably orderly overall, our interview with the principal was interrupted by a call announcing that a student was being taken to an emergency room after a fight. He was not badly injured.

Yet teachers in several LP-Priority schools expressed concern about discipline in their schools. In one, they argued that their principal was far too ready to give second, third, or fourth chances to students who should be suspended or even expelled. Like the principal of the large Improved school mentioned earlier, they said that a few wily disruptive students exerted a very broad influence in the school. It wasn’t just these students themselves who caused trouble, but the many other students that they could “take with them.” The sense that the principal supported students over teachers even when the students were clearly in the wrong was a major bone of contention in the school, one of the issues that kept teachers at odds with the administration and with their colleagues who were known to be supporters of the principal. The principal was not unaware of the issue, but explained that to suspend students risked prompting them to drop out altogether, and in such a poor community with so few job opportunities, this would be economically disastrous for them.

Curricular, Instructional, and Assessment Practices

The BTO-Improved schools implemented a signature set of curricular, instructional, and assessment practices designed to assure all students appropriate and adequate opportunities to learn – and, indeed, to demand or insist that they learn. As indicated earlier, no school implemented all of these practices thoroughly, but each implemented most of them. There were variations in the particulars from one BTO-Improved school to another, but the same sense of results-oriented mindfulness in the use of the practices was evident across all these schools.

Freshman Academies or Other Transition Support. To manage the transition from middle to high school, personalize the environment and reduce dropout rates, and address incoming skill deficits, most BTO and Improved schools had established Freshman Academies. Academies and similar programs were regarded as essential because so many ninth graders enter high school with grossly inadequate reading and math skills – this despite the State Board’s institution of an eighth grade “gateway” designed to prevent middle schools from promoting students who cannot pass End of Grade tests to the high school level. The Academies generally housed ninth graders and teachers of their core academic courses in a separate building or wing, and those large enough to warrant it were subdivided into teams. BTO and Improved schools which had not organized Freshman Academies had created special seminars or other programs to support 9th graders. For example, in one of the large Improved high schools without a Freshman Academy, all 9th graders take an intensive freshman seminar in grammar, reading, and writing in the Fall. Data on incoming students are also reviewed in detail, and students with low skills are assigned to special courses designed to prepare them for End of Course-tested courses (see *Stairstep Courses*, below). One BTO school had also organized a program for “Freshmores,” students who are in their second year of high school but have not passed the courses required for sophomore status. “Freshmores” were offered the opportunity to take double blocks of key courses, such as English I, in order to get back in step with their grade-level friends – reportedly a strong incentive for many students.

Standard Course of Study, Pacing Guides, and Common Lessons. Principals of BTO and Improved schools insisted that teachers follow the NC Standard Course of Study. While allowing some flexibility, they promoted the use of district or school-constructed pacing guides, and in some cases, common lesson formats and lesson plans. When we asked how teachers decide what to teach, a typical response came from the principal of one small BTO school: “That Standard Course of Study of course dictates what is taught in classrooms.” He went on to explain that district-wide curriculum councils in each subject area have developed pacing guides, but that he encourages teachers to spend enough time on each major concept to make sure that students really understand it rather than just racing through the curriculum and risking the possibility that while students are exposed to everything, they understand nothing very well. Principals and teachers in BTO schools seemed keenly aware of the tension between (a) legitimate efforts to assure that students get some exposure to everything they will be tested on and (b) assuring that the numerous topics in the Standard Course of Study do not whiz by before students have an opportunity to grasp them.

The principal of a huge Improved urban school was equally insistent on the Standard Course of Study: “[I tell my teachers that we have to] ... bring them together and teach what really matters and stop all this other wonderful stuff that is wonderful to learn but is not wonderful enough for anybody to care about. But we gotta really teach and review and re-teach and re-loop. That’s been the reason that we have had some growth in test scores.” Not content to simply refer teachers to the SCOS or even to put it into their hands, she worked hard to ensure that teachers really knew and understood it. “You’ve gotta know what they are gonna be tested on,” she said. “I tell teachers, we have to read the Standard Course of Study. We have to literally sit down together and go through it together, sometimes out loud, and make sure we understand what is there. The lead teacher [for an EOC course] and everybody who is going to be teaching a given course. What’s in this thing? What does this mean? How much of this and that do we need? Somebody in the central office has done a pacing guide. So we ask if this will really get us where we need to go. Well, Lord, no. And sometimes I find money and put them together and let them do their own. If they do their own, then they will teach it.”

In a few BTO-Improved schools, members of a department or a team responsible for an EOC-tested subject went so far as to develop and teach a common set of lesson plans on a week by week basis – plans keyed to pacing guides they had developed, themselves.

Rigorous Curricular Standards with Pressure and Incentives to Learn. In one very small school in a primarily African-American community, the principal told us, “When I came in, I had to take a look at the course offerings. Were they rigorous enough? In some cases, we had said, ‘Our kids can’t do this and so let’s not expose them to this, this, and this. I had to fine tune that master schedule and put in some more rigorous course offerings. We didn’t have honors level courses in some subject areas.”

Describing his grading standards, an ex-military teacher of US History told us, “Major tests, 80%. Other tests, 20%. No retesting, no extra credit for homework, no open book tests, no grades for class participation. That’s my grading policy, and I’m not changing it. I grew up in a housing project myself, and I don’t care who they are or what they are. [Potentially] they are all A students. I don’t teach AP, and I don’t want to teach it. I’ve only had 34 students to fail in 13 years.”

Before the EOC exams are given, one BTO school organizes what the principal called a “celebration-motivation program” – a pep rally with a big banner celebrating the facts that the school is the only high school in the district to make high growth and AYP the previous year, cheerleaders, gift items donated by local merchants, and a dance with a DJ. One Improved school had an extensive program of incentives for students to learn. For example, for passing EOC assessments, students received free passes to athletic, theater, music, and other school events. With a “Platinum Card” for high grades, they received a small number of homework passes and opportunities to get out of school early. The same school also offered prizes as well as a one letter grade “bump” for active student participation in its EOC preparation program (see below). At several schools, teachers told of using iPods or less expensive prizes as incentives to get low performing students to after school and Saturday sessions. Sometimes local businesses

underwrote the costs of the prizes, but many teachers routinely paid for prizes themselves. “Last week, I spent \$70 at WalMart,” one told us as others nodded and shrugged off the expense.

Cross-grade Curriculum Articulation. One might assume that if all teachers follow the Standard Course of Study and pacing guides keyed to it, then articulation of the curriculum across grades would take care of itself. If so, teachers told us, one would be incorrect. As a mathematics teacher explained, “I have done assessments to determine the preparation of students I am getting in Pre-Calc, and I feed that back to the teachers who are sending them to me. Where we are working and where we are not working. This led to conversations about “vertical teaming,” because for example, to get to AP courses in the senior year, that starts way back with the teachers in the middle school. The guidance from the Standard Course of Study is not enough. It leaves a lot of room for interpretation and different emphases within it. Fractional powers? You may be doing it, but how much time are you spending on that?”

“Stairstep Curricula” and Curricular Re-Sequencing. The principal of one small BTO school described a “pre-English” course for students who arrived at the high school without having demonstrated proficiency on the 8th grade EOG Reading examination. “We were doing a disservice to these students by throwing them in with students who had already met that bar.” He also noted the addition of a similar “pre-Algebra” mathematics course and the use of “Progressive Algebra,” a modular mastery-based course. He and other principals of BTO-Improved schools explained that the 4x4 block schedule enabled them to work such courses into a student’s course of study without delaying graduation. He did note, however, that students sometimes get “stuck” on a module for some time. In such cases, the teacher “puts them on a contract” which requires them to come to tutoring at least once a week and turn in 100% of their homework in return for advancing to the next module. The school also scheduled students with low if passing scores in Algebra I to take “Tech Math” before taking Algebra II. We came to refer to such intermediate courses permitting students to progress in smaller increments as “stairstep” courses.

Similarly, at a very large urban high school, the principal described working with subject matter teams of teachers to review all of the available data on incoming students. She said the school gets “hundreds of kids who are not ready for high school, kids who slide through the [end of grade 8] gateway.” Students in this category are assigned to a “foundations” course in mathematics, then to Algebra 1a, then Algebra 1b. “We do [something like] this in every single subject.” With a 4 x 4 block schedule, she explained, it is possible by eliminating some electives to create a course schedule that can still be completed within four years. Before students can take Biology, they get a yearlong course in Earth and Environmental Science that is designed to “get them to love science” through a rich diet of field trips, hands-on activities, visits to museums, and the like. For low-skilled students, US History is also split into a two-semester, yearlong course. For students with low but passing scores on the English I EOC test, 10th grade English is a year-long, double-blocked course. To make these classes small enough to be effective for marginal students (about 20 students), Honors level courses are made larger (about 35 students). “*And it’s working, buddy. It will work.*”

BTO and Improved schools also rearranged the traditional sequence and timing of courses to improve continuity or match them up better with students' maturity and experience levels. At mathematics teachers' initiative, one urban BTO school shuffled the traditional Algebra I-Geometry-Algebra II sequence to Algebra I-Algebra II-Geometry. Another made Civics and Economics a 12th grade subject on the premise that many more 12th graders than 8th graders would have experience with work and managing their own money.

Smaller Classes for Lower-Performing Students. It is not only class sizes in "stairstep" courses that BTO and Improved schools are reducing sharply. At the highest-performing BTO school, teachers made a point of the small size of classes for "regular" classes: "Our class sizes [for non-Honors classes] are very, very manageable. They are generally 10 to 17 in English I." Another chimed in that she has 32 students in an Honors section of a non-EOC-tested course. Smaller class sizes not only make it easier to teach challenging students, but also serve as an incentive to teach them. One National Board Certified Teacher at the same school noted that largely because of the smaller size of classes for them, she teaches "regular" classes only.

Interim or Benchmark Assessments. We discussed the use of assessment data to monitoring student progress in the section above on Authoritative Accountability, but it is worth revisiting here as a component of BTO-Improved schools' capacity to promote student learning. Some districts provide high schools with benchmark assessments keyed to a district-produced pacing guide, but principals and teachers in several BTO and Improved schools preferred to develop their own pacing guides and interim assessments. As one BTO principal pointed out, pacing guides and interim assessments developed or selected by teams at the school level engender higher "ownership" and correspondingly more widespread implementation. A teacher in one Improved school described her team's use of results from a common midterm examination in English I. "We went over the questions on the three goals that were lowest. We just didn't worry about cases where just one kid may have missed an item. We used the results on the three goals that all of our kids struggled with and discussed ways that we could re-teach that information. We pulled a lot of resources on tone, and we emphasized tone in all of those selections. Inference was a problem, too. They like to see the answer right there in the text. So we worked on that, too."

Protection of Instructional Time. Perhaps the most impressive example of protecting instructional time is the meticulous and intensive approach to developing individual student class schedules at one BTO school. Each summer, the principal and assistant principals review every single student's schedule request to assure that it will produce appropriate progress toward graduation and that required courses with presumably heavier demands and electives with lighter ones are balanced across the two semesters. According to the principal, it is "unacceptable" for even one student to be mis-assigned to even one class on the opening day of school. Teachers confirmed his claim. The result is that they can get started teaching the very first day without time lost to reworking faulty schedules. This gets the year under way in a crisp fashion and sends a message that the school is well-organized and means business about teaching and learning from the very first day of school.

The principals of several BTO-Improved schools forbade any whole school announcements without their explicit approval. They also limited early departure for athletic events to the minimum necessary time. “The coaches know that they are not going to leave 30 or 40 minutes earlier than they really need to.” One principal shortened the school day by trimming time from class change intervals and lunch. He said that students appreciated the tighter use of time and seemed to concentrate better while in school.

Tutoring. In some BTO and Improved schools, district or DSSF funds are used to provide teachers extra pay for tutoring after school and on Saturdays, but in most, such work is simply an assumed part of their regular responsibilities. As a teacher in a large regional BTO school told us, “We find the problem and we keep going after it and after it until they come in. There is no giving up.” One BTO school hired back a retired to certified teacher to provide small group remediation to students struggling in Biology. The principal noted that when he arrived at the school, “We were just teaching to the middle in our classes. We weren’t remediating nor were we accelerating.” But now, all teachers do tutoring. “That is a requirement and an expectation” for at least one day a week, and teachers are encouraged to go beyond the requirement.

Inventive Preparation for End of Course Testing. The principal at one very large urban Improved school described her school-wide plan to involve the entire faculty in preparing students for End of Course examinations. She assembled the faculty and, to make the point that they are all educated people capable of helping in some area, she asked any teacher without a college degree to raise her hand. This was, of course, greeted only by laughter. Then she listed all of the EOC-tested courses on the whiteboard. She told all teachers that they had to sign up to help with one of the courses and asked them to think about which they were most suited for. Then for a 12-day period, she rearranged the schedule to create an extra period in the day when students would meet with their assigned teacher in small groups – small, because now all students who were about to take an EOC test were distributed across a much larger set of teachers. To assign students to teachers, all students were reviewed individually. The strongest teachers in a given subject were assigned to teach students on the cusp, students whom interim testing showed to be not far below proficiency. Neither the students who were already highly proficient nor those with the lowest skill levels were assigned to the strongest teachers.

She told the students, “These 12 days are going to make you great.” She promised them that if they would attend all sessions and work hard throughout, she would raise their 4th quarter grades by a letter. Some experienced teachers strongly resisted this incentive. She told them, “Let’s think, y’all. You’ve got masses of students who have been sitting there all year not paying attention, a bunch of 15 year olds that my whole career depends on, and y’all’s does, too. Now if we get that kid totally engaged for twelve days of no BS, solid core curriculum review, and that kid believes that if he’s sittin’ there involved, he’s got a shot at passin’, and we’re gonna move him up a letter grade and he’s got a better chance of passin’ those EOCs. If he doesn’t, he’s gonna fail the exam that counts for 25% of his grade, and he’s gonna fail the course. We’re doing this one time, and we’re gonna see what happens. The students went nuts. They’re running around here right now, and they can’t wait ‘til we’ve got prep classes. They think it’s like magic. Even my smart kids go nuts – from a B to an A, they’ll kill for two points. I don’t

know whether the review really raises the test scores, or the kids finally believe there is hope for them.”

The teachers got similarly excited “because they get to work with people they never worked with before.” Those who do not normally teach EOC-tested courses come to appreciate what the EOCs are really all about. “The lead teachers prep them to lead these reviews. They get to see how creative and smart these people are.” She also offers a variety of small but apparently significant incentives. “Make it competitive. The group that scores the highest, we send cards, applaud the teacher, give away \$10 bills to teachers of groups that do well – make it a big deal.”

There was some variation from school to school in which of these practices were implemented, but all of the BTO-Improved schools reported implementing a substantial subset of them. Further, from the details of their reports, it seemed clear that their commitment to the schools’ central goal – high student outcomes for all students – led teachers to carry out the practices with determination to assure learning, not simply to implement them in a pro forma manner.

Comparisons with High Performing and LP-Priority Schools. One of our HP schools had secured a grant to support extensive support to help 9th graders make the transition into the school, including a thorough orientation session, training in the use of planners and time management, and a program that involves volunteer upperclassmen as well as teachers in after school tutoring. The other HP school held special information sessions for the parents of rising freshmen and extensive orientation sessions for the students themselves; freshmen were also housed in a separate 9th grade annex a mile away from the main building. Even their buses were separate from those for upperclassmen. Adherence to the Standard Course of Study and to pacing guides was assumed at both schools, but no extraordinary steps to assure this were in evidence. Both clearly offered a rigorous curriculum, especially for the many students in Honors and AP courses. At one, the relatively few lower performing students were assigned to “stairstep” courses like those described at BTO-Improved schools. There was no mention of smaller classes for low-skilled students at either HP school. Nor did interim assessments, if used, receive prominent mention as reasons for the schools’ success. Instructional time was vigilantly protected at both. At one, as mentioned earlier, there were absolutely no faculty meetings because the principal saw these as taking valuable time from teachers’ attention to instruction – nor for the same reason were there any loudspeaker announcements during the school day, student assemblies, or early dismissal for athletic or other extracurricular events. The principals and teachers at the two HP schools made little or no mention of any special preparation for EOC assessments, but did mention special sessions to prepare students for SATs.

At LP-Priority schools, Freshman Academies and other programs to help 9th graders with the transition to high school were generally just getting under way or still on the planning stages. Two did have intensive literacy programs in place already. One of these was referred to as a Freshman Academy even though it was limited to particularly low-skilled students and was not a comprehensive unit with all of the characteristics described for academies in some of the BTO-Improved schools. Teachers often spoke of using the Standard Course of Study and pacing guides, but these seemed to be new practices in most LP-Priority schools, and principals and some teachers reported that the SCOS and guides were still not fully understood or regularly

followed by many teachers. What we have called “stairstep” courses were not used at all, had been tried on a sporadic basis and abandoned when implementation problems presented themselves, or had been initiated only recently. Similarly, at most LP-Priority schools, benchmark assessments were reported to have been implemented in a pro forma manner, without full understanding of how the resulting data could be used to guide instruction and intervention with lagging students. At most, there seemed to be no determined effort to protect instructional time, and both student and teacher absenteeism – which cut into time for instruction by qualified teachers – was reported to occur at high rates in some LP-Priority schools. Teachers reported that they offer tutoring before and after school, but complained that it was very difficult to get many students to attend. Difficulties in arranging or paying for transportation presented obstacles to tutoring in rural areas. Finally, in these schools we heard no mention of especially inventive or vigorous programs to prepare students for End of Course assessments.

Conclusion

In summary, in BTO and Improved high schools, principals had worked actively to cultivate organizational commitment, hold both individual teachers and groups of teachers responsible for learning outcomes, and thus to strengthen the school’s ability to withstand the inevitable reverses and disappointments. Enlisting active cooperation from teachers, BTO-Improved school principals also effectively recruited, retained, and strengthened their faculties through supervision, professional development, and professional learning communities. Driven by a common commitment to the organization and its goals, and by a combination of administrative and professional accountability, teachers and principals created a disciplined environment for learning and implemented a distinctive set of curricular, instructional, and assessment practices. They did so with an evident determination to assure high levels of learning by all of their students.

In Low Performing and Priority high schools, principals have generally not been as effective in building the same levels of organizational commitment, individual and collective responsibility, and resilience. Morale and reputational problems have made it difficult to recruit, train, and retain faculties of similar quality. As environments, the LP-Priority schools seem to lack the powerful combination of discipline and caring observed in BTO and Improved Schools. And finally, they have not implemented nearly so fully or forcefully the effective curricular, instructional, and assessment practices observed in BTO and Improved schools.

We chose the Beating the Odds schools strategically for their ability to produce high rates of learning with challenging student populations – high percentages of students with low entering reading and math skills, high percentages of students from low income families, and high percentages of students from traditionally disadvantaged ethnic groups. By cultivating the elements of will and capacity outlined above, all five Beating the Odds schools were able to produce High Growth in 2004-2005. Four of the five produced High Growth in 2005-2006, and the other produced Expected Growth. In both years, all five earned designations as Schools of Progress. But despite extraordinary leadership, will, and capacity, in neither year could a single one of them produce a Performance Composite that would entitle it to designation as a School of Distinction or School of Excellence.

By contrast, with somewhat less challenging demographics, one high school with a similar profile of leadership, will, and capacity was able to earn Honor School of Excellence status in 2004-2005 and School of Distinction status in 2005-2006. In 2004-2005, after several years of improvement, the performance gap between African-American and White students in the school was down to about 7 percentage points.

One cannot generalize from small samples of schools, nor project beyond the limits of the data actually collected. We cannot say that with less challenging demographics, more of the BTO schools could have produced a Performance Composite similar to Jack Britt High School's. But the contrast does suggest that concentrating high percentages of students with low entering skills, students from low income families, and students from traditionally disadvantaged ethnic groups in certain high schools makes it difficult to break through an invisible ceiling on performance.

Finally, we reiterate that in 2004-2005, the LP-Priority schools in our sample – schools that are often derided as “failing schools” – all produced either High Growth (3 schools) or Expected Growth (5 schools). They all met or exceeded the State of North Carolina's expectations for the average amount of learning their students should achieve in an academic year. In the next year, apparently as a result of changes in the ABCs system, the status fell to Growth Not Achieved in three LP-Priority schools, but three made Expected Growth and two made High Growth. Thus, out of 16 opportunities (2 years x 8 schools), the LP-Priority schools made High Growth 5 times (31%), Expected Growth 8 times (50%), and Growth Not Achieved 3 times (19%). They met or exceeded the state's expectations for student learning over 80% of the time. Performance Composites in the 30s, 40s, and 50s are certainly not consistent with the obligation to ensure that all of the state's children have an equal opportunity to get a sound basic education. But neither are the data consistent with the assertion that it is these high schools alone that are failing to make good on that constitutional obligation. The data clearly indicate that the problems in our education system begin earlier and are more widely distributed.

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