Chapter 4
Overview of Actions Taken by High Schools to Improve Instruction

Donna M. Harris, Melissa Prosky, Amy Bach, Julian Vasquez Heilig, and Karen Hussar

Introduction

Purpose

Over the course of our fieldwork in 48 high schools, researchers learned about a variety of different strategies utilized with the goal of improving instruction. The objective of this piece is to provide a descriptive overview highlighting actions that high schools were undertaking, framed by the issue of accountability. As stated in chapters 1 and 2, state-level (and in some cases district-level) accountability policies played a major role in the course of actions taken by high schools in their attempts to improve achievement.[20]

This chapter examines strategies for improvement around three key components of accountability systems: (a) standards and content requirements, (b) minimum requirements, and (c) data and assessment. To this end, we have directed the following discussion around three broad categories of strategies: (a) curriculum and instructional strategies to meet standards and content requirements, (b) remedial efforts to meet minimum requirements, and (c) efforts to make use of data and assessments. In each of these sections, we have examined the strategies used, and where available, the major supporters and avenues of support.[21]

We also recognize that high schools take on other responsibilities besides fulfilling accountability requirements. To this end, we have also included efforts around college and career preparation, college outreach, and parental involvement. These categories of strategies were commonly mentioned across the schools in our sample.

Data Analysis

The analysis for this paper relied on the case studies written by the research teams that visited each school. Researchers wrote detailed summaries based on interview transcripts and school documents for each of the schools and districts in the sample. The authors used the 48 high school case studies to create an Excel database of high school actions. This database contained qualitative information about the activities in which schools were engaged. We then assigned codes to each action to categorize the nature of activities that took place.[22] The discussion here describes actions as reported by school-level staff but does not evaluate the quality of implementation or their effect on student achievement.

[20] The field visits took place during the 2002–2003 school year; therefore, schools were only beginning to feel the pressures of NCLB.

[21] The discussion focuses on the initiatives that were most often cited by school staff in each of the categories. For a more complete list, see the tables at the end.

[22] The following list of codes was applied: curriculum and instruction, remediation, professional development, organizational/structural changes, support, assessment and data, and other. These groups were then integrated for the purpose of this paper.

Actions as They Relate to Accountability

Curriculum and Instructional Strategies to Meet Standards and Content Requirements

Schools were engaged in a variety of actions to help students meet the standards and content requirements of their work. Initially, we tried examining curriculum and instruction as separate categories. However, given the degree of overlap between the two, we decided to combine the areas. This section looks at initiatives in two major subcategories: classroom-based strategies and collaborative efforts among teachers.

Classroom-Based Strategies

This category is defined as actions employed by school staff members that could potentially change or impact instruction in the classroom. The most prominent strategy that we found across the 48 high schools was the use of the block scheduling. At least a third of the schools in our sample had either a full block schedule in place, a modified block, had gotten rid of the approach, or were in the process of considering its implementation. Block schedules were often used as a way to get students to spend more time on tested subject areas, and used as a component of various reform measures. In some cases, we learned that professional development had been provided to teachers in schools that were adapting this approach.

Another popular category of approaches used by high schools revolved around the use of test preparation. At least four buildings used "writing across the curriculum" as a way to improve their students' composition skills in different subject areas for standardized tests. An additional intent of this initiative was to help broaden the responsibility among school faculty for improved student writing, rather than simply letting it rest with the English department. Some high schools made use of online sources for test preparation in math and English skills. Students at one Pennsylvania high school reported using My Access, an online writing tutorial that provided students with immediate feedback on their work, while those at a New York school used practice questions from a program called School Island, which cut across subject areas. One California high school even instituted a zero period test prep class, which was required of all freshmen. Finally, there were various motivational strategies used by schools to help improve test performance. Among these, an urban California high school held schoolwide assemblies to stress the importance of testing, while the principal of Pinewood, a similarly situated school initiated a campaign to improve the building's Academic Performance Index (API) score. As part of this effort, students designed and posted motivational posters around the school to encourage their classmates to do well on the upcoming tests.

Across the 48 schools, we saw a few examples of whole school reforms. These included America's Choice, Comer School Development, and High Schools That Work. The introduction of these programs was made possible through the efforts of the buildings' respective school districts. The approach that we saw most fully implemented was the America's Choice model at Tech High School in Florida. Curriculum and instructional components of the program included: Ramp Up, a reading program geared toward 9th- and 10th-grade students who were 1 to 2 years behind in

reading, the Foundations of Advanced Literacy ELA curriculum, and Foundations of Advanced Mathematics. Organizationally, America's Choice incorporated block scheduling as well as an interdisciplinary team to break up the status quo departmental structure. Although High Schools That Work was designed to be a whole school reform, for one urban Michigan school, this was only one of a slew of initiatives taking place in the building. In practice, this approach existed as a single interdisciplinary team encompassing a handful of teachers, and was introduced to help raise student test scores. Finally, one North Carolina high school was in the beginning stages of implementing the Comer School Development Model, which represented a switch from High Schools That Work. At the time of our data collection, we learned that the school had secured funds for teachers to receive professional development around this program.

Teachers and administrators mentioned various opportunities for professional development that were connected to instructional improvement. Some discussed attending conferences that were offered by the International Reading Association (IRA), the National Council of Teachers of Mathematics (NCTM), the National Council of Teachers of English (NCTE), and the College Board. There were also district-sponsored workshops covering topics including Kagan Cooperative Learning and manipulatives in math. One of the most deeply implemented district-supported curricular programs was Core Plus at a suburban high school in Pennsylvania. This program, intended to help increase student achievement in math, involved professional development that was both intensive and embedded.

Researchers asked teachers and administrators about mentoring and classroom observations as part of the visit protocol. Respondents across all six states reported some type of mentoring for new teachers; however, these did not appear to be particularly consequential. For example, some schools would assign a veteran teacher to mentor a new colleague (sometimes in a different department), and this relationship would involve administrative tasks, rather than meaningful conversations about instruction. There was also little in the way of classroom observations among colleagues taking place, aside from formal evaluations by administrators.

Collaborative Efforts to Improve Curriculum and Instruction

In addition to the previously described strategies, we found a variety of collaborative efforts to improve curriculum and instruction in high school. These processes, normally undertaken by groups of teachers, were used to coordinate goals and objectives across departments and schools.

School improvement planning was the most prominent collaborative strategy mentioned for improving curriculum and instruction. These planning meetings provided a forum for staff members to formulate goals, such as raising test scores, improving school climate, and collecting data. In Florida, this process was a state requirement for all schools. In other states, this was supported by districts and often used in conjunction with other activities, such as the North Central Association Accreditation Process in Michigan. Although a commonly mentioned approach by school staff, it often seemed to be merely an exercise in paperwork because of lack of collective follow-up.

At least seven of the schools in the study reported that some type of curriculum alignment took place. This was a process by which teachers incorporated the state and,

where applicable, district standards into the curriculum. The degree to which this work took place varied among our sites. Teachers based at high schools in Michigan had access to the online program MI CLiMB (**C**larifying **L**anguage **i**n **M**ichigan **B**enchmarks). This state-designed program was designed to help teachers align curricular topics to the state benchmarks and link their data to the state curriculum. The two high schools that we visited in Hampton City, an urban Michigan district, used pacing guides, which the district had instituted as part of its curriculum realignment. The purpose of these guides was to ensure that teachers were covering essential areas. An example of curriculum alignment occurring on the school level took place at California's Pinewood High School. At this site, departments devoted much of their collaboration time to revising and aligning their curriculum to state and district standards. Similar to alignment, schools reported engaging in curriculum mapping, whereby teachers worked together in outlining what was going to be taught in each class. This tended to occur in math departments, among teachers who were teaching the same course. At Mission High School, located in an urban Florida district, clusters of math teachers of the same course collaborated on scope and sequence, creating common exams and selecting textbooks. Respondents at a California school reported that a district math consultant visited the math teachers approximately every other month to help map their curriculum. This was a young department which was viewed as having needed the outside assistance.

Other reported collaborative efforts around curriculum and instruction, which helped support accountability systems, were mentioned by respondents in fewer buildings. One of these was actions to establish periodic curriculum cycles in math and English. One Pennsylvania school district, for example, established a 3-year revision cycle. As part of this initiative, students were given twice-a-semester milestone tests that corresponded to content coverage by quarter. At the time of the field visit, these were being given in the math department and were set to begin for English. Another effort mentioned by some teachers was the existence of district-wide curriculum councils. In a California district, for example, all of the buildings, including the high school, provided representation to their curriculum council. The council served as one of several bodies that provided recommendations to the school board for final approval.

Remedial Efforts

Remediation was a major strategy employed by high schools to bring their students up to the minimum state accountability requirements. The chief methods of remediation we found were through a modified curriculum in regular classes, separate remedial classes, and tutoring.

Modified Curriculum in Regular Classes

One of the major findings in this study was the focus on reading in high schools. To this end, we learned about several software packages that were used as part of the regular classroom setting to help remediate low-performing students. Two high schools in Pennsylvania, both located in the same urban district, targeted the Academy of Reading program for use with ninth-grade students who needed the extra assistance. The goals of this program included improving students' technical reading and reading comprehension. A district literacy coach was responsible for implementing the

use of this software program throughout the district. Training and technical support for the program was provided by the company Point Click Learn. Another reading program, called Accelerated Reader, was used at Pinewood High School and a building in North Carolina. Through this program, students took a series of tests, using different texts. The results were then used to determine when the student was ready for the next level.

To help support literacy efforts in the classroom, a number of schools brought in literacy coaches to work with teachers and students. Two urban California schools, both located in the same district, had a district-sponsored outside consultant help teachers with reading across content areas. Another California building reportedly formed a reading department to serve this same purpose. Florida's Mission High School and Harbor High School, also located in the same district, received assistance from the district reading coordinator. This individual visited the buildings once a week to meet with teachers, to assist them with use of CRISS (**CR**eating **I**ndependence Through **S**tudent-Owned **S**trategies) strategies and, as needed, to model lessons.

We also learned about a few computerized remedial programs being used in the area of math. By far, the most commonly cited one was Cognitive Tutor, developed by Carnegie Learning. This program provided help to students who had difficulties in traditional math classes, including Algebra I and geometry. The schools utilizing this program were concentrated in New York, North Carolina, and Pennsylvania. Where this information was known, it was the district that had brought this program to the schools. Other remedial math programs mentioned by schools included Accelerated Math and I Can Learn.

Separate Remedial Classes

To help bring students up to the minimal standards, high schools made available a number of remedial options to bring their students up to speed. These included classes in math and reading, plus broader opportunities that targeted low-performing students.

The major concern regarding high school math was the focus on getting students to pass Algebra I. All of the states in the study included algebra as part of their standardized assessments. The most common approach to dealing with this issue was by stretching out a semester's worth of algebra over the course of a school year. Algebra IA and Algebra IB would be completed in 2 years, instead of the traditional single year. At least four of the visited high schools in North Carolina utilized this extended course of study to help students fulfill the state graduation requirement in algebra. In Michigan, the math department at one high school instituted a second-semester repeat algebra class. This appeared to be mandatory for students who had failed the first semester. A final example of changing Algebra I was seen at Oceanside High School in Florida. In this case, the school offered a double-period Algebra IA/IB "combo" class, which targeted at-risk ninth-grade students.

We learned about separate remedial reading classes in high schools, most of which were concentrated in North Carolina. In at least four schools (three of which do not overlap with the schools mentioned in the previous paragraph), targeted students took reading as an elective course in addition to their regular English class. Students were identified for this class on the basis of failing to meet proficiency on the eighth-grade state reading test.

Florida's Oceanside High School was a school that stood out due to the sheer

number of reading classes offered in the building. A total of 60 classes, ranging from the third-grade reading level through 1 year below grade level, were made available for students. Because of the state accountability grade received from Florida, this school received significant assistance from the district office. Apparently, the district applied for a comprehensive school reform (CSR) grant, and had the funds directed to this particular building. Through a collaborative approach with school leadership, it was determined that remedial reading classes should be instituted as a way of alleviating this recognized challenge.

Other schools made use of additional approaches to assist at-risk students. An urban high school, for example, had a program designed for overage ninth graders to receive instructional support on the campus of North Carolina A&T. Students in this programs took classes including Success 101, English, math, history, and science. A Florida building had a program called Leap Forward to help students who had fallen behind make progress toward graduation at an accelerated rate. The school arranged a course schedule that allowed students to make up significant deficiencies in credit requirements. This program allowed students to develop alternative schedules to attend school part-time or earn credits in off-campus courses.

Tutoring

Respondents from just about every school in the study mentioned tutoring as a way of providing extra help for students. This was usually offered to individual students on a voluntary basis after school. In a few cases, students received tutoring from college students at nearby universities, and in other cases, tutoring was made available on Saturdays.

Making Use of Data and Assessments

A final category of actions examined relating to accountability was around the use of data and assessments. We saw few examples of high schools collecting and otherwise employing their data. When asked about this, most teachers and administrators would mention discussing the results of the state assessment at a school or department meeting, but little follow-up beyond that. This section discusses the handful of instances where there seemed to be additional efforts to collect and utilize data to inform instruction. Actions in this category include the use of diagnostic tests, progress assessments, a comprehensive database, an outside vendor program, and on-site personnel.

After years of frustration of having students misplaced in classes (e.g. students receiving credit for Algebra I in middle school without having learned the material), the math department at Mission High School decided to create a diagnostic test. This test targeted all incoming students to ensure that they were appropriately placed. Other schools used diagnostic tests in conjunction with progress assessments to track student achievement. A California high school, for example, used Northwest Regional Educational Laboratory (NWREL) assessments in math, reading, and writing. These were administered to students three times a year (beginning, mid-year, and year-end) to help place students and measure their growth. Another school, located in the same state, administered the Stanford Diagnostic Reading Test. Like the NWREL assessments, this one was also given three times a year to gauge student progress. This test targeted incoming ninth-grade students to help place them into appropriate classes.

Faculty at two Michigan high schools, both located in the Hampton City School

District, mentioned the district-created quarterly assessments. These assessments corresponded to the district's pacing guides and were instituted as part of the effort to realign the curriculum across all grade levels. Although the use of the quarterly assessments was mandated by the district, it was up to school-level administrators and department heads to monitor their use. Some teachers did resist using this tool, because they were not sure how these data were going to be used.

An urban Florida district created a comprehensive database containing demographic and student assessment records for all students. Although the goal was to have teachers use these data to make informed decisions about their instruction, teachers at the district's Oceanside High School reported making very minimal use of this information.

There was one suburban California site in the study that discussed using an external vendor for using data. At the urging of the principal and central office, the school used the web-based assessment platform available from Edusoft. This program was used for tracking student performance on the California state standards for three kinds of tests: state exams, district benchmarks, and in-class teacher tests. This was used to help inform instruction and chart students' academic progress.

Some schools had personnel based on-site for the purpose of supporting data use. For example, at a rural California school, one of the educational planning specialists was charged with analyzing data. Florida's Harbor High School had an in-house "test chairperson" who managed and interpreted district and school data. It is noteworthy that for staff working with data, this was only one of many responsibilities on their agenda.

Actions Beyond Accountability

Although we found that most of the actions used by high schools were in response to accountability, it should be stated that schools strived to fulfill additional goals. These included the provision of challenging programs to prepare students for higher education, preparing students for employment after high school graduation, and increasing parental involvement.

Magnet Programs

A few sites we visited had magnet programs located within the high school building. Part of the purpose in devising these programs was to attract high-achieving students from around the school district, with an application process required for entrance. At Mission High School, students could choose from among academies focusing on business and technology, the arts, and liberal arts and sciences. One Michigan high school housed a well-regarded performing arts academy. Finally, Oceanside High had an International Baccalaureate (IB) program, which had been in place for several years. We were told that when the program was first introduced, Oceanside was the only school in the district to have it. Over time, however, other schools brought it in, which led to some competition across the district for high-performing students. Some staff members admitted that these students were helping the school to avoid the label for Florida's lowest grade in the state accountability system.

Advanced Classes

Most schools across the six states provided high-achieving students with opportunities to take advanced-level classes. For example, students could dual enroll in courses at local institutions of higher education. There were also Advanced Placement (AP) courses at many sites. Some teachers reported attending AP conferences, which provided information about teaching at this level. Our data collection did not provide detailed information about which subject areas these classes covered or how many students took advantage of them.

College Outreach

We learned about different measures that schools were taking to help direct students, particularly minorities, towards college. An urban New York school ran an initiative called Gateway to Higher Education, which was intended to help prepare high- achieving minority students for college and careers in the sciences. Mission High School held a forum so that students to could learn more about college from the alumni of the school. Harbor High School, located in the same Florida district, partnered with a several area organizations as part of the ENLACE (Engaging Latino Communities for Education) program, a partnership was to increase the number of Latino students graduating from high school and college. Areas of focus included tutoring, test preparation, and mentoring.

Career Preparation

Although they were not a direct focus of our field research, we did learn about some programs that schools had in place for preparing students for future employment. High schools in both Michigan and Florida allowed students to job shadow professionals in their area of interest. Other schools had variety of vocational education options available to students. At a New York school, for example, students could take classes in areas including architecture, communications, and culinary arts. A North Carolina school had a technology trade program in which students could dual enroll at the local community college while taking technology classes at the high school.

Parental Outreach

A final area that schools discussed beyond accountability was parental outreach. High school tends to be the grade level where parents are the least involved, and schools were trying out different ways to combat this. Two rural North Carolina schools, both located in the same district, had an initiative called Face to Face to encourage communication between teachers and parents. Parents had the opportunity to meet with their children's teachers four times during the academic year. Twice a year, students led these conferences and shared their portfolios with their parents. A California high school initiated a parent institute, which we were told included 300 participating parents during the year prior to the field visit. This 10-week program (parents came once a week for 10 weeks in the morning or the evenings) provided parents with information about different aspects of the high school and the services available for their children. This program was especially relevant for parents from different cultural backgrounds, who may not have been familiar with the United States school system. Another high school in the state had a parent technology training program. This initiative, which reportedly involved over 50 parents, encouraged the use of technology and English language acquisition in the home.

Table 1. Curriculum and Instructional Strategies to Meet Standards and Content Requirements

Strategy	Description/Purpose	Web Site
America's Choice	Prepare students for state and local assessments, and for college.	http://www.ncee.org/acsd/program/high.jsp
Block Scheduling	Spend more time on tested subject areas for students to learn concepts, minimize disruptions.	
Comer School Development	Connect child development with academic success.	http://info.med.yale.edu/comer/
Core Plus Math Curriculum	Curriculum to help students master math standards.	http://www.wmich.edu/cpmp/ http://www.glencoe.com/sec/math/cpmp
CRISS Strategies (**CR**eating **I**ndependence Through **S**tudent-Owned **S**trategies)	Help teachers develop strategies for improving student learning.	http://www.projectcriss.com
Curriculum Alignment, Curriculum Mapping	Incorporate standards into the curriculum. Includes class clusters and use of pacing guides.	
Curriculum Cycle	Periodically update the curriculum.	
Department Chair Off-Periods	Develop curriculum and share with the department.	
District-Wide Curriculum Council	Give teachers a voice in shaping the curriculum, working with colleagues in other schools.	
Freshman Academy	Give ninth graders a separate space in the school, more personalized attention.	
High Schools That Work	Increase expectations, prepare students for college and work.	http://www.sreb.org/programs/hstw/hstwindex.asp
Literature Circles	Prepare students for state tests by having them read in small groups.	
Math Journal	Help students understand concepts, rather than engage in rote memorization.	
MI CLiMB (**C**larifying **L**anguage **i**n **M**ichigan **B**enchmarks)	Help Michigan teachers align curricular topics to state benchmarks.	http://www.miclimb.net/

Table 1 (continued). Curriculum and Instructional Strategies to Meet Standards and Content Requirements

Strategy	Description/Purpose	Web Site
My Access	Writing tutorial that provides immediate feedback to students.	http://www.vantagelearning.com/
National Board of Professional Teaching Standards	Strengthen teaching standards.	http://www.nbpts.org/
North Central Association Accreditation Process	Help schools meet higher standards.	http://www.ncacasi.org
School Island	Provide practice test preparation in math, English, science, and social studies.	http://www.schoolisland.com/review/login.asp
School Improvement Planning	Give school the opportunity to formulate goals, including raising test scores and improving climate.	
Teaming	Improve teacher collaboration.	
Thinking Maps	Help students answer different kinds of questions, and track their thought process in reading and writing instruction.	http://www.thinkingmaps.com/
UC-Irvine Collaborative Writing Project	Help teachers improve their writing instruction.	http://www.gse.uci.edu/uciwp/
Validated Instructional Practice (VIP)	Program with multiple components, including having teachers follow certain practices in every class and administration of mini-tests.	
Visual, Equation, Solution, Answer the Question (VESA)	Rubric for helping students improve their math skills—along the same lines as writing across the curriculum.	
Writing Across the Curriculum	Improve writing across subject areas.	

Table 2. Remedial Efforts

Strategy	Description/Purpose	Web Site
Academy of Reading	Software program to improve reading skills.	http://www.autoskill.com/products/reading/index.php
Academy Programs	Provide extra attention to at-risk ninth-grade students.	
Accelerated Math	Software with individualized lessons to improve math skills.	http://www.renlearn.com/am/
Accelerated Reader	Software to help teachers monitor reading progress.	http://www.renlearn.com/ar/overview/default.htm
Carnegie Math/Cognitive Tutor	Software with individualized lessons to improve math skills.	http://www.carnegielearning.com/start.cfm?startpage=products/
Compass Learning Software	Software programs providing extra assistance across various subject areas.	http://www.compasslearning.com/
Grade Recovery Course	Prevent student dropout by allowing students who failed a marking period to improve their grade to a C by attending after school sessions.	
I CAN Learn (**I**nteractive **C**omputer **A**ided **N**atural **Learn**ing)	Computer-based program to help students with algebra skills.	http://www.icanlearn.com/
Leap Forward Program	Help students who have fallen behind to make progress toward graduation at an accelerated rate.	
Literacy Coaches	Work with teachers and students to bring reading strategies into the classroom.	
Modified Algebra Classes	Includes expanding one semester of algebra into two, double-period algebra, and the use of Integrated Math.	
NCE English	Bring students up to standard in English.	
NovaNET	Courseware to assist struggling students in meeting the standards.	http://www.pearsondigital.com/novanet/
Read 180	Software to help improve reading skills.	http://teacher.scholastic.com/products/read180/
Reading Classes	Stand-alone classes to improve students' reading skills.	
Tutoring	Assist students with their work, normally on a voluntary basis.	

Table 3. Data and Assessment Actions

Strategy	Description/Purpose	Web Site
Diagnostic Tests	Help place students in appropriate classes. Examples included the Northwest Regional Educational Laboratory assessments, Stanford Diagnostic Reading Test.	http://www.nwrel.org/assessment/
Database of Student Information	District-designed system to give teachers access to student background data.	
Edusoft	Web-based platform to help schools track assessment performance.	http://www.edusoft.com/login.jsp
Quarterly Assessments	Track student progress over the course of the school year, make sure teachers are following curriculum.	
School-Based Personnel	Coordinate, analyze, and manage data at the school.	

Table 4. Actions Beyond Accountability

Strategy	Description/Purpose	Web Site
African American Student Outreach	Invite African American leaders to encourage students to enroll in more demanding classes.	
AP Classes	Rigorous course for college prep.	http://apcentral.collegeboard.com/
College Forum	Alumni visit school to discuss their college experiences with students.	
Dads and Donuts	Increase male parental outreach.	
Dual Enrollment	Provide more options for students.	
ENLACE (Engaging Latino Communities for Education) Program	Increase graduation rates among Latino students.	http://www.wkkf.org/Programming/Overview.aspx?CID=16
Face to Face	Increase parental involvement through conferences.	
Gateway to Higher Education Program	Prepare high-achieving minority students for science careers.	
Job Shadowing	Allow students to see professionals in their field of interest.	
Magnet Programs	Attract high-achieving students. Programs include academies and the IB program.	http://www.ibo.org/ibo/index.cfm
Parent Connect	Provide parents with greater access to their child's information.	
Parent Institute	Ten-week program for parents to inform them about the high school.	
Parent Technology Training Program	Program to increase parents' computer skills.	
STRIVE Program	Partnership with outside organizations to provide mentoring for students.	
Test Nights	Present parents with information about the state test and encourage them to provide home preparation.	
Vocational Education Opportunities	Give students options to pursue coursework linked to career opportunities.	