



High School Reform in Chicago Public Schools: Autonomous Management and Performance Schools

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High School Reform in Chicago: Autonomous Management and Performance Schools

Introduction

The Autonomous Management and Performance Schools Program (AMPS) in the Chicago Public Schools (CPS) is designed to grant high-performing and/or promising schools certain academic, programmatic, and operational freedoms. The underlying premise is that such schools can benefit from autonomy from district programs and rules such that they have more flexibility to serve the needs of their students as they see best. This initiative is one piece of the district's broader strategy to turn around the district's high schools in order to reduce high dropout rates, promote student achievement, and prepare students so that they are ready to attend college.

In theory, AMPS status is meant to confer a number of autonomies to schools that should enable them to better serve their students. The goals of the program are as follows:

- To test and pilot innovation that could later be used across all schools
- To attract and retain high quality principals to CPS
- To learn what existing district services are valued and are working for schools
- To allow CPS to focus time and resources on schools with greater need¹

Initially the district used high student achievement as the key criteria for selecting AMPS schools. Consequently, most of these schools were selective enrollment schools, which serve the city's highest achieving students. In the following years, however, the program has invited applications from both high-achieving schools and from schools that are on a positive achievement trajectory. To be selected, this second group of schools had to have a strong leader who the district felt could, with some additional autonomy from central office, increase student outcomes

The Research Study

In this section, we outline the data collected in this study, the analysis methods used, and the research questions that provide the foundation for our work.

Methods

The study team conducted one-day site visits in fall 2008 to 5 of 21 AMPS high schools selected from Cohort 1 (two schools), Cohort 3 (one school), and Cohort 4 (two schools).² We used a stratified random sampling design to select schools from each year. Team members interviewed principals, school counselors, department chairs, special education teachers, and selected mathematics, science, and English language arts teachers. The study team conducted classroom observations of 18 teachers in two Cohort 1 schools and one Cohort 3 school. Observations were not conducted at Cohort 4 schools because they are in the first year of AMPS implementation. See *Snapshot of High School Instruction in CPS*, for more detailed information

List of goals is available at http://www.cps.edu/Programs/DistrictInitiatives/Pages/AMPS.aspx.

² "Cohort" refers to the group of schools selected to participate in the AMPS program beginning in the same schools year, beginning with Cohort 1 in 2005-06. There were no high schools selected for Cohort 2. As of fall 2008, there are a total of 139 AMPS schools, most of which are elementary schools.

on the classroom observations. The appendix to this report includes the rubrics for the specific instructional dimensions we report here.

After the five site visits, site debriefing reports were completed for each school. A team of analysts from SRI and CCSR identified the predominant themes and findings that emerged from the site debriefs, as well as data from principal interviews and classroom observations.

Research Questions

In order to understand more about the AMPS initiative and how it is implemented at the school level, we focused on the five guiding research questions listed below.

- 1. What are the background characteristics of AMPS schools and how were they selected?
- 2. What are the outcomes at AMPS schools and how do they differ by year of selection?
- 3. What does instruction at AMPS schools look like?
- 4. What autonomies do the schools have? What are the principals' perceptions of the autonomies? How do the autonomies affect teachers?
- 5. What is the role of the district in implementing and monitoring AMPS? How do AMPS schools rely on external support providers?

We address the research questions in turn. First, we provide some background information on AMPS high schools. Then we present information on selected student outcomes and teacher performance during classroom observations we conducted in the subset of AMPS schools included in this study. Subsequently, we look at the various autonomies that schools have, and principals' and teachers' perceptions of these autonomies. Next, we examine the role of the district in AMPS implementation. Finally, we summarize the key findings that emerge from our analysis.

Background Characteristics of AMPS High Schools

In this section, we provide an overview of the AMPS schools and their common characteristics. Because the selection mechanism for AMPS participation varies by cohort, we also include a discussion on school selection and present incoming student achievement data. We end with a description of the instruction we observed in these schools.

Cohort 1 schools are different from subsequent cohorts due to the initial focus on high achievement as the sole selection criterion.

AMPS schools fall into two groups. The first is Cohort 1, which were granted AMPS status based on their high student achievement with no application process. The second group is made up of the subsequent cohorts (Cohorts 2 through 4). These schools applied to be AMPS schools and were selected because they were on a path toward improvement and had principals who the district considered to be strong leaders.

Many of the Cohort 1 schools had selective student enrollment policies. The district identified these schools because they proved that they could produce positive student outcomes with minimal district support. Staff at Cohort 1 schools saw their participation in the AMPS initiative as a status symbol. One guidance counselor noted, "AMPS allows us to do things that other schools don't. I don't know all that's involved in being an AMPS school, [but] you can only be an AMPS school if your students are achieving, so there's some status in that."

Unlike Cohort 1 schools, schools considered for participation in subsequent cohorts had to submit applications to the district. The district then selected AMPS schools using different criteria that focus on the principal's leadership capacity and the potential for the school to improve, while moving away from the focus on past performance. These schools in our sample applied to become AMPS schools because they felt that they were on the right track to improving student outcomes and that they could better do that with some autonomy from the district. Because the criteria for selection were not as well defined as those for Cohort 1, some teachers in the newer cohorts did not have a clear understanding of the purpose of the AMPS initiative.

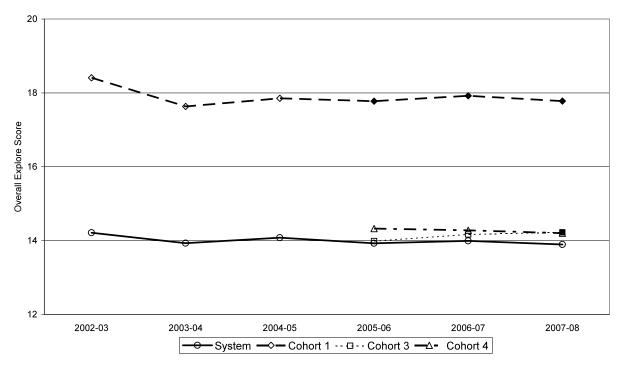
Because of the selection criteria, Cohort 1 schools are much higher achieving than schools in subsequent cohorts, whose achievement patterns look similar to those of other district schools.

AMPS high schools vary widely in terms of incoming student performance. Generally, Cohort 1 schools had students who entered their schools with higher scores on the EXPLORE assessment than students in schools selected in later cohorts. Entering student scores on EXPLORE in Cohorts 3 and 4 are similar in range to the average CPS school, although there is variation even among schools in the same cohort.

Exhibit 1 presents incoming EXPLORE scores for AMPS schools and CPS as a whole starting in 2002. The data used in Exhibit 1 are from 10 Cohort 1 schools, 3 Cohort 3 schools, and 7 Cohort 4 schools.³ We only show data for Cohorts 3 and 4 starting in 2005, since two schools in each of those cohorts opened in that year.

³ There are 8 Cohort 4 AMPS schools. One of them serves special populations, so is not included in descriptive statistics in this section.

Exhibit 1
Incoming EXPLORE Scores at AMPS Schools and CPS System



It is not surprising that incoming achievement at Cohort 1 schools is higher than it is in CPS, given the fact that Cohort 1 AMPS high schools are mostly selective enrollment schools and have a history of high performance on state assessments. The reasons for selection in the later cohorts include area instructional officer (AIO) recommendation, strong leadership, or promise of growth. This difference in selection criteria among the AMPS cohorts accounts for differences in entering EXPLORE scores.

There are other differences between AMPS schools and CPS schools overall. Exhibit 2 provides a snapshot of freshmen in 2007-08. It shows that, on average, AMPS schools have a slightly higher Latino population and a lower African-American population than CPS overall, and fewer freshmen students qualify for free or reduced-price lunch. In addition, on average, proportionately fewer freshmen in AMPS schools receive special education services and proportionately fewer students are old for grade than is the case among CPS schools overall. These differences are larger between CPS and Cohort 1 schools than they are between CPS and later AMPS schools, which more closely mirror CPS overall.

Exhibit 2
Demographic Characteristics, Freshmen in AMPS Schools and CPS Overall, 2007-08

	Cohort 1			All AMPS	All CPS
	10	Cohort 3	Cohort 4	20	122
	schools	3 schools	7 schools	schools	schools
Racial composition (%)					
African-American	29.6	24.0	57.4	38.5	61.2
Latino	37.1.	61.4	38.2	41.1	31.1
Receiving free or					
reduced-price lunch (%)	45.7	73.5	76.2	61.5	73.1
Special Education (%)*	4.8.	15.3	12.2	9.0	14.5
Old for Grade (%)	8.6	20.6	25.1	16.1	30.2
Incoming ninth-graders'					
average ISAT scale					
scores					
Math	290.1	261.8	253.4	276.2	258.4
Reading	263.6	241.3	262.4	253.0	241.0

Special education includes the following classifications: having a learning disability, having an emotional or behavioral disability, or being educably mentally handicapped.

Student Outcomes at AMPS Schools

AMPS does not have an overall program or strategy intended to directly impact student outcomes. Instead it relies on providing strong leaders with some flexibility that may allow them to find productive and creative ways to increase student engagement and learning. Thus many mechanisms for improvement are plausible. For example, we might expect to find that principals are more satisfied with their jobs and therefore stay longer, providing stability as a possible foundation to build schoolwide practices leading to increased student engagement and learning. We might expect to find that principals have more time to spend on core activities that are closely correlated with student performance, for example, leading instructional improvement and visiting classrooms. We might also expect to find that teachers participate in professional development more directly tied to their practice, which, in turn, may lead to both student academic achievement and student academic behaviors. Alternatively, to the extent that AMPS schools—especially those in Cohort 1—were selected for already high academic performance, we might expect AMPS schools to simply maintain their prior trajectory. Ideally we would hope to see student growth, although it may take time for some of the possible AMPS benefits to be reflected in student outcomes.

The data we have do not allow us to fully explore these possible linkages. We will not be able to untangle whether participating in AMPS had any impact on student growth, or whether the selection to be an AMPS school is simply ratifying school strength that would have led to growth anyway. Instead, here we provide descriptive information about student performance over time. This approach allows us to examine continuing or accelerating growth in student outcomes; it also allows us to see how AMPS schools performance compares to that in all of CPS over time, which we discuss next.

Students in AMPS schools are absent fewer days than in CPS overall.

We look at days absent as an indicator of student engagement in school and as a prerequisite to academic success. As Exhibit 3 shows, students at CPS schools overall were absent more days than students at AMPS schools. Exhibit 3 presents the number of days freshmen were absent from school in each of three years, 2004-05, 2005-06, and 2007-08. During the transition to a new student information system in 2006-07, absences were not reliably collected, so they are not presented here. Also, because of the change in the procedure for collecting attendance data, it is not possible to compare data from 2005 with data from 2007. What we can do, however, is compare for each year the average number of days absent for freshmen attending AMPS schools with the number of days absent for freshmen attending all CPS high schools. Exhibit 3 presents the average number of days absent for freshmen who were not considered truant (i.e., for those students who accumulated fewer than 30 days absent in a semester).

Exhibit 3
Student Absences, AMPS Schools and CPS System

2004-05 (<i>N</i> schools)	Average days absent per year, non-truants* 2004-05 (<i>SD</i>)	2005-06 (<i>N</i> schools)	Average days absent per year, nontruants 2005-06 (SD)	2007-08 (<i>N</i> schools)	Average days absent per year, non- truants 2007-08 (SD)
CPS overall	14.8	CPS overall	14.4	CPS overall	20.5
(81 schools)	(6.0)	(88 schools)	(5.9)	(90 schools)	(8.5)
Cohort 1, prior	6.7	Cohort 1, first	6.8	Cohort 1, third	9.0
to AMPS	(3.1)	year of AMPS	(3.1)	year of AMPS	(5.6)
(10 schools)		(10 schools)		(10 schools)	
Difference:		Difference:		Difference:	
CPS-Cohort 1	8.1***	CPS-Cohort 1	7.5***	CPS-Cohort 1	11.5***
		Cohort 3 prior	7.2	Cohort 3, first	15.7
		to AMPS	(4.3)	year of AMPS	(3.2)
		(3 schools)		(3 schools)	
		Difference:	- 044	Difference:	4.0
		CPS-Cohort 3	7.2**	CPS-Cohort 3	4.8
				Cohort 4, prior	16.2
				to AMPS	(7.2)
				(7 schools) Difference:	
				CPS-Cohort 4	4.3

^{*} Nontruants are students who accumulated fewer than 30 days of absence in a semester.

^{**} Difference is significant at p < .05

^{***} Difference is significant at p < .001

Note that in all cohorts and in all of the years listed in Exhibit 3, students at CPS overall were absent more days than students at AMPS schools. While we cannot untangle whether schools were chosen for AMPS for reasons that might also be related to strong student attendance or whether being AMPS schools encourages practices that lead to strong student attendance, good attendance is foundational to academic success, and AMPS schools have better attendance rates than CPS overall. That said, it is still important to note that while students in AMPS schools in the later cohorts are absent on average fewer days than students in CPS schools, they still miss over 3 weeks of school a year.

AMPS schools vary in meeting expected growth targets from EXPLORE to PLAN.

Students in CPS take the EXPLORE test at the beginning of their freshman year and the PLAN test at the beginning of their sophomore year. Therefore the difference between the two scores can be considered a measure of freshmen test score growth. Although both tests are on the same scale, determining growth based on student scores on both is somewhat complicated. The Exhibit 4 below explains some of these difficulties.

Exhibit 4 Using EXPLORE to PLAN Scores

It makes intuitive sense that test score growth should be measured by finding the difference in scores between tests taken at two different times. However, ACT, the creator of EXPLORE and PLAN, has found empirically that students' initial scores on EXPLORE are related to how much they are expected to grow before taking PLAN. Furthermore, the relationship between EXPLORE and PLAN also varies according to the subject matter being tested and is not simple to describe. For example, a student with an EXPLORE score of 12 on each subtest and a PLAN score of 14 on each subtest would be making "expected gains" in math, English, and reading, but not in science. If a student with an EXPLORE score of 15 in all subtests got a score of 17 on all PLAN subtests, again a gain of 2, that student would have a gain of 1 point more than expected in English and science, 2 points more than expected in math, and would just meet expectations in reading.

Furthermore, different versions of each test exist and although they are carefully equated by the test maker, sometimes one version is still "harder" than the previous one, making year-to-year comparisons difficult.

To account for the first problem, we used a metric called "meets," created by subtracting students' expected gains from their actual gain. If students attain their expected gain, their "meets gain" score would be zero. Students whose gains are smaller than expected given their initial EXPLORE score in the subject area would receive negative "meets gain" scores; students whose actual gains are better than expected would receive positive "meets gain" scores.

To account for the second problem, we have included the system average "meets gain" score as a comparison point. If there are form effects (i.e., the test in one year being more difficult than the test in another year), we believe the effects will be reflected in the same ways in both AMPS and overall system performance. We should therefore consider whether AMPS schools are improving relative to the system and whether they are improving over time.

Exhibit 5 below presents composite EXPLORE to PLAN gains for schools in all three AMPS cohorts over time. The schools in Cohort 1 have "meets gain" scores above zero in all years. These scores mean that, on average, schools in this cohort have students who are making stronger gains than we would expect given where they started and given the subject matter. In addition, the schools in Cohort 1 have "meets gains" scores that are significantly higher than CPS overall. The differences in "meets gains" scores between AMPS Cohort 1 schools and CPS overall are significant in all years.

Schools in Cohorts 3 and 4 have "meets gains" scores that are generally below zero; in other words, on average students in these schools are not meeting their expected gains. Freshmen in Cohort 3 schools in 2007-08 have a "meets gains" score of about zero (-.01). The differences between schools in Cohorts 3 and 4 and CPS overall are not statistically significant.

⁴ The lines for both Cohorts 3 and 4 do not extend back before 2005. Although some of the schools in each cohort were in existence before that time, some of them were not.

The difference between Cohort 1 and CPS overall is large enough that it has less than a .0001 probability that it could have happened by random chance (p < 0.0001).

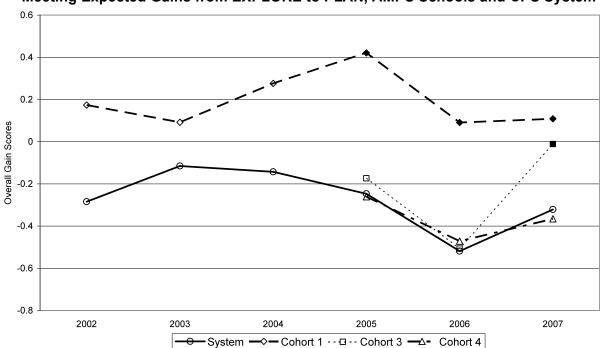


Exhibit 5
Meeting Expected Gains from EXPLORE to PLAN, AMPS Schools and CPS System

Exhibit 5 shows us whether AMPS schools on average have "meets gains" scores that are above or below what would have been expected based on initial EXPLORE scores. It also portrays what has happened to CPS gains scores over time, as a possible indicator of "test form effects." We can see that CPS overall, as well as schools in all AMPS cohorts, experienced a decline between 2005-06 and 2006-07, followed by an increase in the following year. When we examine the slope of the lines between 2006-07 and 2007-08, it appears that Cohorts 1 and 4 increase at a slower rate than CPS, while Cohort 3 increases more rapidly than CPS overall. While the increase among Cohort 3 schools in that year looks promising, it is not statistically significant, perhaps because there are only three schools in that cohort.

Appendix B shows "meets gains" graphs for the subject matter subtests—reading, math, English, and science. The results are similar to those in Exhibit 5 with a few differences. First, while schools in Cohort 1 have "meets gains" scores in all subtests that are statistically higher than CPS overall, their rate of change from 2006-07 to 2007-08 in math, science, and reading is significantly lower than CPS' rate. And, although we found that the difference between Cohort 3 and CPS overall in rate of change on the composite score from 2006-07 to 2007-08 was not statistically significant, there is a marginally significant positive difference between school in Cohort 3 and CPS overall in the science and English subtests.

Overall, then, although AMPS does not pursue a set of strategies intended to improve curriculum and instruction in an explicit and consistent way across participating schools, we do see that certain student outcomes are mixed among the AMPS schools. In particular, Cohort 1 schools were selected as higher-performing schools and appear to maintain their performance levels compared to the CPS system overall. Cohorts 3 and 4 schools, in contrast, entered AMPS

at performance levels closer to that of the system overall. Neither group of schools is significantly different from CPS overall. However, between 2006-07 and 2007-08, schools in Cohort 3 increased their "meets gains" scores more than CPS, with the difference reaching marginal significance in two subject matter subtests.

Instruction in AMPS Schools

AMPS schools pursue a variety of strategies to maintain the quality of their curriculum and instruction.

AMPS schools are characterized by innovative scheduling and programs to meet the needs of their students.

AMPS schools generally have a history of implementing school-initiated reforms in order to meet the needs of their students. For example, all of the schools we visited had altered school day schedules and/or different calendars, which resulted in built-in opportunities for staff to work together within the school day and in increased instructional time for students.

These schools did not use this increased time only with students to focus on core academics—many schools provided additional electives and seminars. For example, one school is able to offer seminars that explore educational avenues beyond the typical curriculum and expose students to activities they would not normally experience, such as fly-fishing. Another school built a film lab in order to offer film classes. A chemistry teacher at this school said, "Just having freedom to explore these types of programs let alone commit to them is one thing that the AMPS program has allowed us to do through nonstructure." At yet another school, the school implemented seminar days once a week. Students participated in the seminar in the morning and had early dismissal so that teachers could participate in school-based professional development later in the afternoon.

Some schools have also rearranged the schedule of courses to better meet the needs of their students. One school restructured its curriculum to offer Algebra I in 9th grade and Algebra II in 10th grade, so that students would not forget the content they learned from one year to the next (the typical structure calls for Geometry in 10th grade and Algebra II in 11th grade).

Teachers report a great deal of instructional and curricular freedom in AMPS schools.

In the same way that AMPS principals enjoy some freedom from the district, teachers in AMPS schools generally cited having a high level of instructional and curricular freedom in their classrooms. At many of these schools, this freedom was in place prior to AMPS participation. As a math teacher stated, "With autonomy comes a certain amount of freedom that allows us to develop the students as we see fit...we are pretty open as far as how I can present the lesson...and that, to me, is very important." An English teacher in another school talked about how he used research reports as the impetus behind restructuring his entire curriculum: "I had the ammunition [research] to make the argument that curriculum needed to be changed. I went to the principal and said I want to redo the curriculum, and he said, 'Go for it.'"

Although this study cannot tell us the extent to which autonomy has led to any meaningful changes in curriculum or instruction among AMPS schools or whether autonomy has helped AMPS schools sustain certain curricular and instructional practices, direct classroom

observations do allow us to describe the range of instruction we found in a few of the AMPS schools. These observations are not representative across AMPS schools but do capture a reasonable range within the schools where we conducted observations. Below, we discuss dimensions of classroom management, communication, and instructional demand in those AMPS classrooms.

Classroom Management

Classroom management encompasses procedures that provide for seamless transitions from one activity to another, efficient handling of materials and supplies, explicit lesson structure and appropriate pacing, and appropriate teacher responses to student misbehavior. Teachers proficient at managing *transitions* within lessons lose little instructional time, and students understand the procedures and take responsibility for moving smoothly from one activity to another, for example, moving from listening to the teacher give instructions into small group work. Chaotic transitions are the mark of unsatisfactory performance. Similarly teachers proficient at handling *materials and supplies* have routines established for students to readily access the materials with little loss in instructional time.

Managing *structure and pacing* is at the intersection of management and instruction. Proficiency in this area requires teachers to plan their lessons with a structure that is clear to students, for example stating objectives, presenting concepts, guiding students through practice examples, and giving students a related group assignment. Proficiency in structure and pacing also means that the lesson has a planned pace that is appropriate to the activities, including enough time for students to engage in the material. Unsatisfactory pacing is evident when the lesson is either too slow or too rushed, or both at various times during the class.

Proficient *response to student misbehavior* refers to respectful and appropriate teacher responses when students are disruptive in class. Lack of response and responses that are overly harsh or disrespectful are all unsatisfactory.

AMPS teachers are skilled in classroom management.

AMPS teachers generally rated proficient or distinguished across the various dimensions of classroom management (Exhibit 6). Smooth-running classrooms generally mark experienced teachers; only one of the observed AMPS teachers was a novice. Over 70% of AMPS teachers were proficient or distinguished in their management of transitions, materials and supplies, and structure and pacing. In structure and pacing, a slightly higher number and percentage of teachers were basic compared to the results on other classroom management dimensions. Teachers rated as basic in structure and pacing lost some instructional time; for example, in one science class, some students did not have any activities or assignments for approximately 13 minutes after completing a guiz early. In contrast, a mathematics teacher rated proficient structured the class with homework review first, smoothly transitioning to the lesson. During the lesson, the teacher gave students adequate time to solve problems in their groups, walked around and checked on each group while they were working, and asked if everyone was finished before moving on. In another math classroom, a clear structure of independent work and whole class review had been established, with the teacher giving clear expectations for how much time each activity should take. None of the students indicated that they were rushed, and students were working from bell to bell.

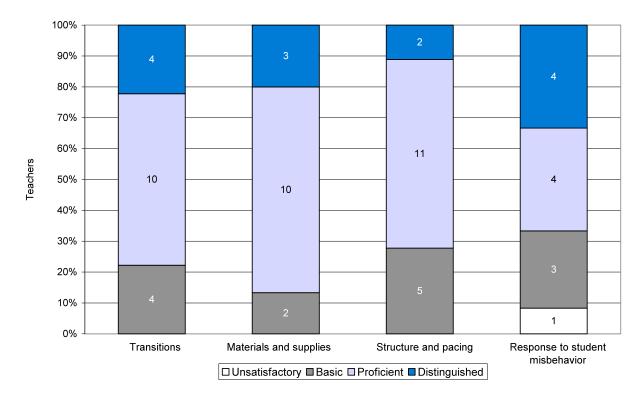
Teachers who received high ratings on management of transitions also had set procedures so that students knew what to do without the teacher telling them directly. For example, in one AMPS classroom the researcher noted that the students manage the materials, leaving to use the restroom and working on a variety of assignments independently. In another classroom, the teacher starts the lesson promptly and students are able to direct themselves around the room to different parts of the activity so that the teacher can work with individual students. In both of these classrooms, no instructional time was lost during transitions within the lesson or between activities.

A larger percentage of teachers were distinguished in their responses to student misbehavior, but an equal number were less than proficient. The AMPS teachers rated unsatisfactory in their responses to student misbehavior were generally unaware of inappropriate student actions, for example, in one science classroom, a teacher failed to notice that a student was blatantly copying answers from his neighbor. At the basic level, teachers are aware but are inconsistent in reigning in the misbehavior. For instance, in an English class, while the teacher worked with small groups, students in other groups were off task, turned around in their seats, or sitting on desks to talk to others. Occasionally the teacher asked the students to focus on their work but with little effect. Teachers proficient in handling student misbehavior identify and deal with isolated incidents early and quietly before the whole class is disturbed; for example, another English teacher scanned the classroom while students worked and stopped students when they started packing up their belongings early. In other cases, teachers approached individual students who were off task, quietly asked them why they were not doing their work, and came back to check on them afterwards. In these classrooms, teachers seemed to also establish clear classroom procedures and rules so that any misbehavior was isolated and easier to manage.

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⁶ The number of teachers with ratings for response to misbehavior is smaller than that for the other dimensions because if no student misbehavior occurred during the observation period, teachers did not receive a rating on response to misbehavior.

Exhibit 6 AMPS Teacher Ratings on Dimensions of Classroom Management



Communication

We also looked at how well teachers communicated their expectations for learning, the importance of the content, and explanations of the content for the lesson. Teachers proficient at communicating their expectations for learning provide students with a clear purpose for the lesson and put the lesson within the context of broader learning, for example, showing how the lesson relates to the main concepts in the subject area or the real world. Communicating the importance of content proficiently means that teachers convey a personal conviction about why they are teaching the material to students and that students value the content. Communicating a negative attitude towards the content or justifying the content because it is mandated are unsatisfactory. Explanation of content is proficient when teachers use appropriate language and relate the content to students' own knowledge and experiences. Unclear or confusing explanations and inappropriate language (including vocabulary that is too low or too high or too complex) mark unsatisfactory performances.

AMPS teachers are generally strong in communicating expectations and content.

The majority of AMPS teachers we observed demonstrated proficient and distinguished performance on the three dimensions of communication (Exhibit 7). Roughly three-quarters of the teachers were proficient in setting expectations for learning. One quarter were distinguished in establishing the importance of content in addition to almost 60% who were proficient.

Similarly, AMPS teachers were able to explain the content clearly to their students, with 35% rated as distinguished and 50% proficient. A few teachers were unsatisfactory in communicating their expectations for learning and explanations for content, indicating pockets of teachers who may need additional support. AMPS teachers proficient in setting expectations for learning help students understand that there is more to learn. One math teacher explained:

I'm going to pass out a new sheet. I want you to do the last one for homework. We can't do the proof in the next 10 minutes. I think we'll be spinning our wheels, so I want you to think about it. I want you to prove that it's an equivalence equation.... If you think you've got good proofs, read 4.3 because it's a lot to read.

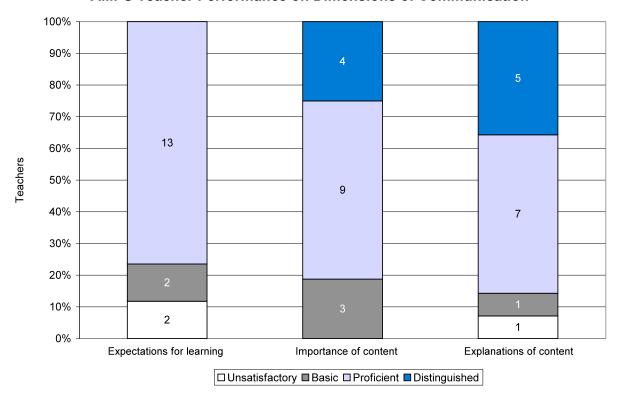
Similarly, teachers proficient in establishing the importance of content were compelling in helping students understand that their lesson in class was relevant to future learning. For example, a math teacher told students: "We're winding up number theory. This is going to come up again and again. Put this in your toolbox. You can probably always come back to that." Another math teacher, proficient in explaining content, worked to ensure that students had sufficient practice and could demonstrate their understanding:

How many people feel like this helped them understand? Raise your hand if you feel like you still need work? What I'll do tomorrow is put up another matrix multiplication just to make sure we're all on the same page.... What this graphing section is going to do is link algebra to the graph. A step beyond just doing the algebra.... As you're working through these, practice and check your work on the Nspire. If you can't figure out where you went wrong, we'll go back to it.

In contrast, teachers rated basic or unsatisfactory in setting expectations for learning or for the importance of content often did not state a clear purpose to the lesson.

Exhibit 7

AMPS Teacher Performance on Dimensions of Communication



Instructional Demand

We explored instructional demand in terms of teachers' stated expectations for learning achievement, the activities and assignments they ask of students, the feedback they give to students, and the quality of their questions to guide student learning. Teachers proficient at establishing *expectations for learning achievement* express high expectations in the stated outcomes, the designed activities and assignments, and the various interactions with students during the lesson. Proficient *activities and assignments* are appropriate to students and stimulate cognitive engagement among students, not just the appearance of their being on task. To be proficient, teachers need to provide *feedback to students* in a timely manner and in a way that individualizes instruction for students, telling students the extent to which their specific work meets standards. Finally, the *quality of questioning* raises instructional demand on students when they allow for divergent responses, provoke hypotheses, prompt connections to other experiences, or shake students' previously held beliefs. Proficiency in questioning also means that students have enough time to formulate thoughtful responses and that the pace of questioning is not rushed.

AMPS teachers' performance was variable on instructional demand compared to their performance on other dimensions of teaching.

The AMPS teachers we observed exhibited more variability along the dimensions of instructional demand than for those under classroom management and communication (Exhibit 8). Specifically, although a large majority (roughly 90%) was rated proficient or

distinguished in the appropriateness of activities and assignments, lower proportions were rated similarly in setting expectations for learning achievement and providing timely and relevant feedback to students. Teachers rated basic in activities and assignments do not provide sufficient challenge in the activities they set, leading to a lack of student engagement. For example, in one math class we observed, most students were completing a worksheet, going really slowly in plotting points on a graph or alternatively racing through it just to get it done. In contrast, in an English classroom where the teacher was rated proficient, students followed a video closely and asked many related questions on the current portrayal of African-Americans in Hollywood and the music industry. In a math classroom where the teacher was rated distinguished, students were further challenged and provided choices in their activities that engaged them intellectually. Students were asked to solve review problems around the room on the topic of logs, exponential growth, and decay, using whatever resources they needed. Students selected which problems to work on, with whom to work, and what they needed to solve the problem, including technology or discussions with peers and the teacher.

AMPS teachers, like those in other Chicago public schools, were rated much lower in terms of the quality of the questions they posed to students.

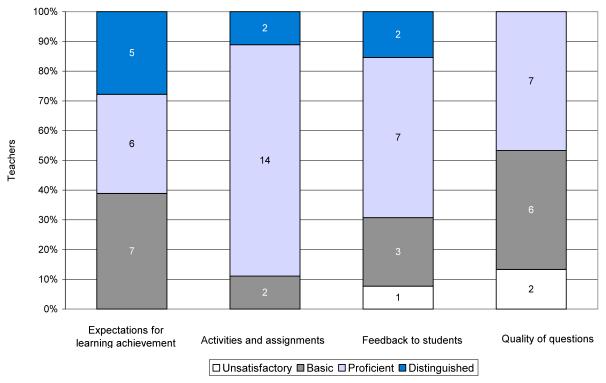
Instructional demand is reflected by the quality of questions that teachers ask of students and by student responses to those questions. It is worth noting that teachers, regardless of initiative in the larger study, struggled with this element. Just over half of AMPS teachers received a rating of unsatisfactory or basic in this element, a result which indicates that questions were of low level and posed in rapid succession. No teachers were rated distinguished in this element.

In classrooms where teachers were successful with asking questions, they probed students and asked them to dig deeper. Highly rated teachers asked questions like the following:

- How do you know?
- Can you give me an example?
- So what ties it back to the thesis?
- Why do you think the problem is worse in low-income areas?
- Do you agree with that?

Teachers who received lower ratings in AMPS schools generally asked factual, one-word response questions. For example, one teacher asked what patterns students were seeing, but he did not provide wait time for the students. Instead he put the completed graph on the overhead. In another typical exchange, the teacher asked, "What kind of triangle is this?", and the student responded, "isosceles," without any follow-up questions.





It is impossible to disentangle the effects of having an innovative staff and principal from the effects of the autonomies that AMPS provides.

In sum, schools varied by cohort in terms of incoming student achievement. Cohort 1 schools, which were mostly selective enrollment schools, have higher achieving students than do later cohort schools. Despite this difference, there were some commonalities across cohorts. For example, all the schools we visited had implemented creative scheduling, including different start times, student seminar days, and dedicated time for staff to work together. In addition, the quality of instruction we observed at these schools was generally high. For the most part, it is impossible to disentangle the causes of these trends. It may be that because AMPS schools have an innovative staff and principals, they are both selected for AMPS and they have innovative programs. It may also be that selection as an AMPS school and the accompanying autonomies help schools to become more innovative.

AMPS Autonomies and Principal and Teacher Perceptions

AMPS schools in our sample did not vary widely in the autonomies they selected. Utilized autonomies included the following:

- Opting out of area office supervision and meetings
- Opting out of district-provided professional development

- Asserting more authority over budgetary issues
- Opting out of the district induction program for new teachers

All five of the schools we visited chose the first three autonomies, while only one of the schools decided to provide their own induction support to new teachers. We found some confusion about what autonomies are available to principals. For instance, one principal shared the school's application with us, which listed many more autonomies. In fact, when AMPS began, 10 autonomies were listed in its documents. However, principals in some schools mentioned only being given the four options listed. Because a common characteristic of AMPS schools is having innovative principals, for some of the schools these autonomies were akin to what they were already doing, and Cohort I staff in particular did not see AMPS as having much effect on their schools. For example, one teacher at a Cohort 1 school thought the school had always been autonomous: "That's how it was set up initially, from what I know."

AMPS schools generally opt out of participating in area meetings and area supervision.

Principals reported one major benefit of AMPS status as the autonomy to opt out of area office supervision and mandates, which include monthly area meetings for principals. This autonomy provided principals with more time in their buildings. Because of this benefit, they felt able to run their schools more efficiently, to spend more time in classrooms as instructional leaders, and to place more attention on their school's vision and mission. As one principal reported, "It's freed us up to be able to really create those programs that meet our students' and teachers' needs. Freed us up to focus on internal [issues] and not reacting to external mandates." Another principal noted, "Another incidental benefit is being outside the bureaucracy—saved a lot of my time and my AP's time as well; that's going to the area stuff and a lot of the required directives from central office; helps us focus more on the instructional piece, on growing the PLCs [professional learning communities]."

Another principal did not opt out of the area the previous school year, but the principal decided to do so after conversations with the teaching staff who felt that opting out of the area would allow them "to miss unproductive mandatory meetings and free the school from having to comply with mandates that were in conflict with what the school is already doing."

A clear benefit of participating in AMPS is a school's freedom to craft its own professional development.

All of the schools in the sample took advantage of the freedom to create their own professional development opportunities that fit the needs of their teachers and students. They identified the ability to provide their own professional development as a motivation for becoming an AMPS school. AMPS high school principals perceived their needs as different from other schools within the district and, thus, believed that they did not benefit from the districtwide professional development offerings. One principal said, "I think that one of the concerns was that we be able to identify very specific professional development opportunities for our teachers—that would meet our teachers' and students' needs—and the district, due to the high number of schools in the system, would not necessarily be able to provide resources for that." A principal at another AMPS school mentioned that "as we've hired new teachers over the years, many of

those teachers have expressed concern about the scripted professional development that was being provided by CPS. I think we can probably do it better ourselves."

Similarly, teachers in AMPS high schools enjoyed the freedom to participate in the design of their own professional development—even though many of them had little detailed knowledge of the AMPS initiative itself. Many teachers we interviewed liked the freedom because they best knew the needs of their students and also strengths and weaknesses of their teaching staff. Opting out of district professional development allowed teachers to tap into their own resources in order to develop their own school-based supports. For example, one principal distributed a year-end professional development survey where teachers identified their "needs and talents." The principal then matched teachers based on the survey results. Teachers at this school were unanimously supportive of peer-designed professional development.

Just as teachers at AMPS schools sought out their own professional development, principals took advantage of opportunities for professional development. Principals reported receiving professional development from a variety of providers that they found helpful. Three of the five AMPS principals cited the principal trainings offered by the CPS Office of Principal Preparation and Development as an important source of support for leadership development. In addition, two principals reported attending workshops sponsored by local and national professional providers. Three principals noted that they especially enjoyed the support they received from networking with other AMPS principals in the system.

AMPS schools took advantage of the flexibility to control their own budgets.

All of the sample AMPS schools indicated that they exercised some degree of budget autonomy. The relative control over their budgets is what allows the schools to choose and implement the professional development, to offer interesting classes, to hire or retain staff, and to make decisions that best serve their schools. AMPS schools reported having greater budget flexibility and efficiency than they had before earning the AMPS status. A Cohort 3 school principal said, "We're a school with a rather large amount of discretionary funds...during the course of the year, if you want to move those funds into different budget lines, you go to your LSC, they approve it. In the past I would get initial approval at the area office and sometimes that would take several weeks."

Examples of budget autonomy include redefining staff positions, using funds on materials and supplies without obtaining the approval of the area or central office, and moving funds around to cover gaps in discretionary spending. One Cohort 4 school described how budgetary autonomy facilitated some decisions on redefining positions and approving budget transfers in order to address student needs for postsecondary exploration. An English teacher at this school noted that teachers were able to use funds to plan and organize college visit events for students three to four times a year. At another school, a science teacher noted that although funds for Advanced Placement were cut across the district, the principal was able to cover the gap through discretionary use of funds. This budget authority to allocate and spend funds to meet school needs appears to be a critical element for supporting school improvement.

AMPS schools were less likely to opt out of the district induction program.

Only one of the schools in the sample decided to provide their own induction support to new teachers. The induction support at one school, however, resembles traditional buddy-system mentoring. New teachers at this school work with a buddy to learn the school's policies and procedures. At another school, the principal decided to provide their own induction so that they have control over "where it's done and content" so that it is "geared to [the school's] goals." New teachers at this school are assigned an in-house mentor and attend an orientation at the beginning of the year and a celebration at the end of the year. There is also a formal mid-year check in to determine what support new teachers need.

When discussing the district's professional development offerings, one teacher at another AMPS schools cited the shortcomings of the district's induction program. The principal at this school, however, said that the school did not opt out of district induction support because there had been positive feedback.

It is worth noting that none of the 18 AMPS teachers we observed were in their first 2 years of teaching. Perhaps if AMPS schools have fewer new teachers than non-AMPS schools, principals do not see opting out of induction support as having far-reaching effects on their staffs.

Role of the District and External Support Providers

In this section of the report, we discuss the role of the district in AMPS implementation, including district support to AMPS schools, district communication to principals and school staff, and accountability of AMPS schools. There is also some discussion of external support providers.

AMPS schools use of district resources varies widely, generally depending on the school's need to raise student achievement.

AMPS schools appreciate their autonomies and are able to exercise some operational and programmatic freedoms. However, the schools, especially the later cohorts, are still concerned about student achievement. These schools fulfill related needs by continuing to accept certain district supports or by participating in other regional networks. The utilization of district support, we conjecture, is related to the need to increase student outcomes. For example, selective enrollment schools in the study did not need to increase test scores, so they did not use the district for this type of support. On the other hand, nonselective enrollment schools have a longer distance to travel in order to become high-performing schools.

When asked about support from the district, all principals cited that they relied on the AMPS office when they needed any support. The AMPS office served as the liaison between the AMPS schools and the district. A number of principals in all cohorts reported that they looked to the district to assist them with legal and student disciplinary matters. One principal highlighted how the AMPS office provides support by handling student expulsions, providing data, and facilitating communication by disseminating a newsletter highlighting district events that interest principals. Another principal contacted the district only "if there was a problem," and this principal would first contact the AMPS office. Some principals also mentioned utilization of the

Research, Evaluation, and Accountability (REA) website and REA-provided student outcome data.

A key district support for AMPS schools is facilitating an informal network among principals and school staff.

One consistent strategy that CPS has adopted for supporting AMPS schools is to promote relationships among the AMPS school principals. The AMPS office has encouraged networking among principals and allocated grant funding to AMPS schools to work collaboratively on teacher professional development or on instructional initiatives. One school from Cohort 1 described how the school shares three or four AMPS grants with other selective schools and other magnet schools to work on some of the key elements of their instructional program. The principal said, "Knowing that we could collaborate with other selective enrollment faculties—share best practices that way—was important to us." Several principals from AMPS schools in later cohorts said that meeting with other principals regularly and using grant funds in support of joint professional development with other high performing AMPS schools helped to address school needs; they were able to work and learn from the other AMPS schools.

AMPS schools supplement or supplant district resources with support from external providers.

AMPS schools have cultivated resources and developed external networks to support their school programs and goals. All AMPS schools reported receiving support from a network of external partners consisting of for-profit companies, nonprofit organizations, and universities. One school cited receiving informal and formal supports through a university-based organization and a local nonprofit organization, both of which specialize in postsecondary preparation. Similarly, one school described how its math teachers work collaboratively with math instructors at a local university. Two schools from later cohorts reported purchasing the services of for-profit companies specializing in test preparation and data analysis to provide professional development to teachers. The diversity of these external networks testifies to the agility of these schools to develop networks to meet individual school needs. Reliance on external support also is in line with the AMPS philosophy that these schools should have the freedom to define their own professional development.

Among AMPS school staff, there remains a great deal of confusion about AMPS and its implications for the school.

In general, teachers struggled with articulating what AMPS is and how AMPS status affects the school. One teacher said that the district sent somebody to the school before the beginning of the year to talk about AMPS, but that there was still confusion over the implications, and there was no follow-up to this initial session. One area the district could improve, then, is how it communicates the implications of AMPS to teachers, including how AMPS status was awarded, the autonomies available to the school, and how the AMPS office holds the school accountable.

Not fully understanding the autonomies afforded to schools can lead to distorted perceptions regarding accountability and apprehension among staff. At one school, some teachers feared the autonomies would give the principal too much power and they could be fired.

Cohort 1 schools believed that their autonomies freed them to continue to improve their performance with no clear sense of accountability to the district, whereas Cohorts 3 and 4 teachers were not clear about their school's accountability for performance, especially at schools where student performance was an issue.

One reason for this lack of clarity about AMPS and accountability may be linked to the way in which the autonomies are exercised. The school principals are the ones who have the authority to choose and exercise those freedoms. The lack of clarity may be indicative of the communication and decisionmaking style of the principal. The ambiguous nature of AMPS could also be a function of the district implementing an initiative in the schools without specifying accountability measures to all school staff in return for AMPS status.

Implications and Conclusions

AMPS is an initiative designed to give schools increased autonomy to address local needs in support of improved student performance. This report describes characteristics of AMPS schools, including attributes of classroom instruction in these schools, the autonomies AMPS schools select and principal and teacher perceptions of these autonomies, and the role of the district and external support providers in AMPS implementation. The implementation of AMPS is in its early stages with only 21 CPS high schools having attained AMPS status. Given the early implementation combined with our data limitations, this report depicts what AMPS looks like in practice at the school level.

Key findings include the following:

- Schools varied by cohort in terms of incoming student achievement data. Cohort 1 schools generally have higher-performing students than do later cohorts, whose performance is similar to that of the district. Schools' outcomes have not changed substantially subsequent to their participation in AMPS.
- The instruction that we observed at these schools was typically of high quality, although teachers' performance levels were less consistent for dimensions of instructional demand than for dimensions under classroom management and communication.
- Principals generally chose three autonomies: opting out of the area, providing their own
 professional development, and exercising additional budget authority. In general, the
 principals felt that these autonomies freed them from district and area obligations and
 allowed them to spend more time in their school buildings. Further, the extra time and
 additional budgetary authority allowed them to focus more on instruction and less on
 bureaucratic tasks. Another commonality of AMPS schools includes the
 implementation of flexible scheduling.
- Teachers struggled with identifying what AMPS status meant. Many teachers in Cohort 1 schools said that AMPS was seen as a status symbol, but teachers in later cohorts either could not identify AMPS at all or had misconceptions about AMPS.
- Although teachers struggled with articulating the benefits of AMPS, they were overwhelmingly positive about the freedoms that the autonomies gave them. In particular, teachers appreciated being able to opt out of district and area training. This freedom allowed them to develop their own school-based professional development,

- which reflected their own professional needs as well as their students' needs. Teachers also claimed to have more time devoted to subject-area or grade-level teams.
- While all principals appreciated the autonomies granted to them, student outcome data, especially in later cohort schools, indicate that there may be a role for individualized support to struggling AMPS schools. This may be accomplished by adding structure and intentionality to professional networks for teachers and principals in AMPS schools.
- In order to alleviate teacher and principal confusion about AMPS, the district might consider clearly articulating accountability standards to all AMPS schools and providing clear guidelines and benchmarks to make accountability transparent.

References

Chicago Public Schools. (n.d.) *Autonomously managed performance schools (AMPS)*. Retrieved March 2009, from http://www.cps.edu/Programs/DistrictInitiatives/Pages/AMPS.aspx

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Appendix A. Classroom Observation Rubrics

Exhibit A-1
Observation Rubric for Classroom Management

	Performance Level				
Dimension	Unsatisfactory	Basic	Proficient	Distinguished	
Management of transitions	Transitions are chaotic, with much time lost between activities or lesson segments.	Only some transitions are efficient, resulting in some loss of instructional time.	Transitions occur smoothly, with little loss of instructional time.	Transitions are seamless, with students assuming responsibility in ensuring their efficient operation.	
Management of materials and supplies	Materials and supplies are handled inefficiently, resulting in significant loss of instructional time.	Routines for handling materials and supplies function moderately well, but with some loss in instructional time.	Routines for handling materials and supplies occur smoothly with little loss of instructional time.	Routines for handling materials and supplies are seamless, with students assuming some responsibility for efficient operation.	
Structure and pacing	The lesson has no clearly defined structure, or the pace of the lesson is too slow or rushed, or both.	The lesson has a recognizable structure, although it is not uniformly maintained throughout the lesson. Pacing of the lesson is inconsistent.	The lesson has a clearly defined structure around which the activities are organized. Pacing of the lesson is generally appropriate.	The lesson's structure is highly coherent, allowing for reflection and closure. Pacing of the lesson is appropriate for all students.	
Response to student misbehavior	Teacher does not respond to misbehavior, or the response is inconsistent, is overly repressive, or does not respect the student's dignity.	Teacher attempts to respond to student misbehavior but with uneven results, or there are no major infractions of the rules.	Teacher response to misbehavior is appropriate and successful and respects the student's dignity, or student behavior is generally appropriate.	Teacher response to misbehavior is highly effective and sensitive to students' individual needs, or student behavior is entirely appropriate.	

Source: Danielson (2007).

Exhibit A-2
Observation Rubric for Communication

	Performance Levels				
	Unsatisfactory	Basic	Proficient	Distinguished	
Expectations for learning	Teacher's purpose in a lesson or unit is unclear to students.	Teacher attempts to explain the instructional purpose, with limited success.	Teacher's purpose for the lesson or unit is clear, including where it is situated within broader learning.	Teacher makes the purpose of the lesson or unit clear, including where it is situated within broader learning, linking that purpose to student interests.	
Importance of the content	Teacher or students convey a negative attitude toward the content, suggesting that is it not important or has been mandated by others.	Teacher communicates importance of the work but with little conviction and only minimal apparent buyin by the students.	Teacher conveys genuine enthusiasm for the content, and students demonstrate consistent commitment to its value.	Students demonstrate through their active participation, curiosity, and taking initiative that they value the importance of the content.	
Explanations of content	Teacher's explanation of the content is unclear or confusing or uses inappropriate language.	Teacher's explanation of the content is uneven; some is done skillfully, but other portions are difficult to follow.	Teacher's explanation of content is appropriate and connects with students' knowledge and experience.	Teacher's explanation of content is imaginative and connects with students' knowledge and experience. Students contribute to explaining concepts to their peers.	

Source: Danielson (2007).

Exhibit A-3
Observation Rubric for Instructional Demand

	Performance Levels				
	Unsatisfactory	Basic	Proficient	Distinguished	
Expectations for learning achievement	Instructional outcomes, activities assignments, and classroom interactions convey low expectations for at least some students.	Instructional outcomes, activities and assignments, and classroom interactions convey only modest expectations for student learning and achievement.	Instructional outcomes, activities and assignments, and classroom interactions convey high expectations for most students.	Instructional outcomes, activities and assignments, and classroom interactions convey high expectations for all students. Students appear to have internalized these expectations.	
Activities and assignments	Activities and assignments are inappropriate for students' age or background. Students are not mentally engaged in them.	Activities and assignments are appropriate to some students and engage them mentally, but others are not engaged.	Most activities and assignments are appropriate to students, and almost all students are cognitively engaged in exploring content.	All students are cognitively engaged in the activities and assignments in their exploration of content. Students initiate or adapt activities and projects to enhance their understanding.	
Feedback to students	Teacher's feedback to students is of poor quality and not provided in a timely manner.	Teacher's feedback to students in uneven, and its timeliness is inconsistent.	Teacher's feedback to student is timely and of consistently high quality.	Teacher's feedback to students is timely and of consistently high quality, and students make use of the feedback in their learning.	
Quality of questions	Teacher's questions are virtually all of poor quality, with low cognitive challenge and single correct responses, and they are asked in rapid succession.	Teacher's questions are a combination of low and high quality, posed in rapid succession. Only some invite a thoughtful response.	Most of the teacher's questions are of high quality. Adequate time is provided for students to respond.	Teacher's questions are of uniformly high quality, with adequate time for students to respond. Students formulate many questions.	

Source: Danielson (2007).

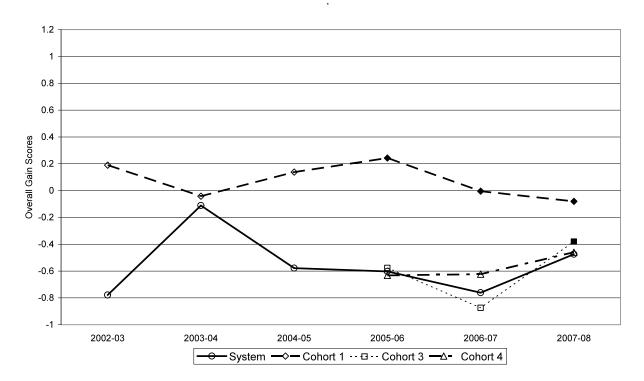
Appendix B. Meeting Expected Gains from EXPLORE to PLAN by Subject

The following exhibits present results for freshmen in AMPS schools and in CPS overall on the four subject-specific tests that make up EXPLORE and PLAN. In all exhibits, we plot the difference between attained and expected gains. If a student attained his or her expected gain, the score on these graphs would be zero.

Exhibit B-1

Meeting Expected Gains from EXPLORE to PLAN in Mathematics,

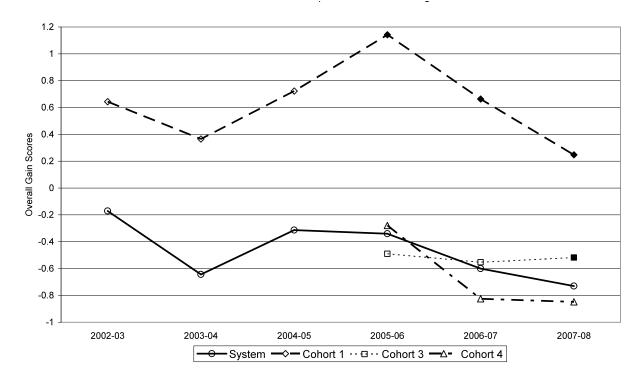
AMPS Schools and CPS System



Note: Solid data points denote the years that the schools participated in AMPS.

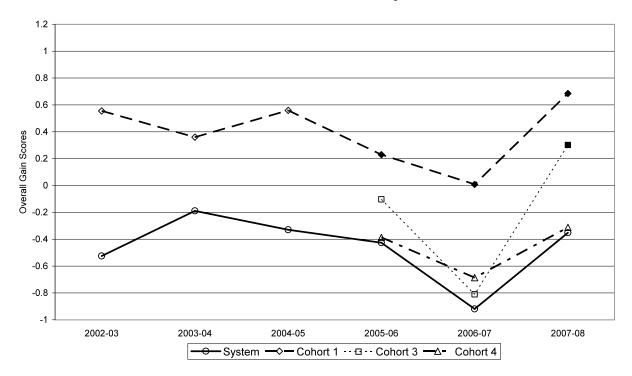
The difference between the first year of AMPS schools and CPS overall in the "meets gain" score in mathematics is statistically significant in all years except 2003-04, while the differences between Cohorts 3 and 4 and CPS overall are not significant. The change between 2006-07 and 2007-08 for schools in Cohort 1 is significantly less than the change in the same year for CPS overall.

Exhibit B-2
Meeting Expected Gains from EXPLORE to PLAN in Reading,
AMPS Schools and CPS System



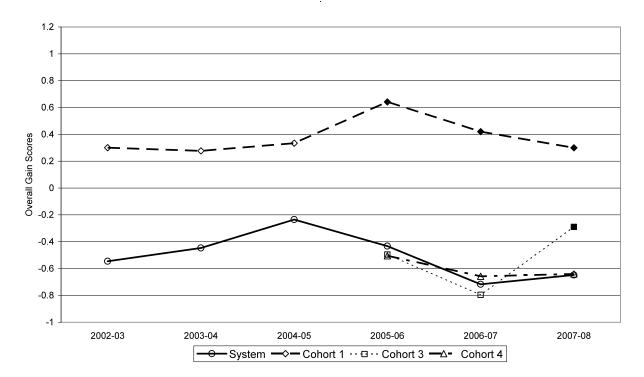
The difference between schools in AMPS Cohort 1 and CPS overall on the "meets gain" score in reading is statistically significant in all years, while the differences between schools in Years III and IV are not statistically different from CPS. The change between 2006-2007 and 2007-2008 for schools in AMPS Year I is significantly less than the change in CPS schools overall.

Exhibit B-3
Meeting Expected Gains from EXPLORE to PLAN in English,
AMPS Schools and CPS System



The difference between AMPS schools in Cohort 1 and CPS overall is statistically significant in all years. The change between 2006-07 and 2007-08 for AMPS Cohort 3 schools is more than the change in CPS (difference is marginally significant, p < .10).

Exhibit B-4
Meeting Expected Gains from EXPLORE to PLAN in Science,
AMPS Schools and CPS System



The difference between AMPS schools in Cohort 1 and CPS overall is statistically significant in all years. The change between 2006-07 and 2007-08 for AMPS Cohort 3 schools is more than the change in CPS (difference is marginally significant, p < .10), while the change in the same year in AMPS Cohort 1 schools is significantly less than the change in CPS overall..