

RESEARCH BRIEF APRIL 2014

# Free to Fail or On-Track to College Why Grades Drop When Students Enter High School and What Adults Can Do About It



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# Summary

Across most high schools, students' attendance and academic effort suffer in the transition to high school, leading to a decline in grades. This puts students at a disadvantage for high school graduation and for college and career readiness. Schools and teachers have a big role to play in preventing these declines. High school teachers often assume freshmen are ready to take on the responsibility for managing their own academic behavior; students interpret their new freedom to mean that attending classes and working hard are choices rather than responsibilities. Systems that monitor student attendance and engagement and strategies that respond to student withdrawal can help reverse the decline in grades in the transition to high school.

Ninth grade is the make-it-or-break-it year for many high school students. Research has shown that students who pass their ninth-grade classes are very likely to graduate from high school—and those who get mostly As and Bs in ninth grade are almost guaranteed to do so. At the same time, those who fail just one or two classes in ninth grade are at high risk of never graduating. In fact, ninth-grade performance is a better predictor of who eventually will graduate from high school than either eighth-grade test scores or background characteristics such as gender, race, and economic status.<sup>1</sup>

Despite the importance of freshman-year grades for graduation, student course performance drops markedly during the high school transition. Studies show that, on average, ninth-grade students attend fewer days of school, struggle more to stay motivated, and receive lower marks in classes than they did in eighth grade.<sup>2</sup> These issues are particularly pronounced in urban areas. Overall in Chicago, more than half of freshmen fail a course, and the average unweighted freshman GPA is below a C.<sup>3</sup>

Drops in GPA are worrisome because course performance is extremely important for future outcomes. Ninth-grade GPA is an incredibly strong predictor of high school graduation. High school

GPA is also the strongest predictor of college graduation—only students who graduate with at least a B average have a 50 percent chance of earning a four-year college degree.<sup>4</sup> Yet, because grades drop considerably in ninth grade, very few students end the ninth-grade year with a B average or better.<sup>5</sup> Grades do not improve, on average, as students move through high school.<sup>6</sup> Such low course performance leads many students to drop out of school and have few quality post-secondary opportunities.<sup>7</sup> Few students finish high school with course grades that indicate they will succeed in college.

Why do students earn lower grades as they begin high school? How do student behaviors and school practices contribute to the decline? And what can schools do to support students during the transition? A team of researchers at the University of Chicago Consortium on School Research (UChicago CCSR) is studying the high school transition to answer these questions and to provide schools with evidence that can be used to craft targeted solutions to improve ninth-grade course performance. This research brief describes the extent of the decline in grades and academic effort as students enter high school in Chicago, as well as school practices that lead to this decline.

It also highlights promising approaches teachers and schools have used to address these issues. We begin in the next section by examining how course grades change across the high school transition.

**KEY FINDINGS:**

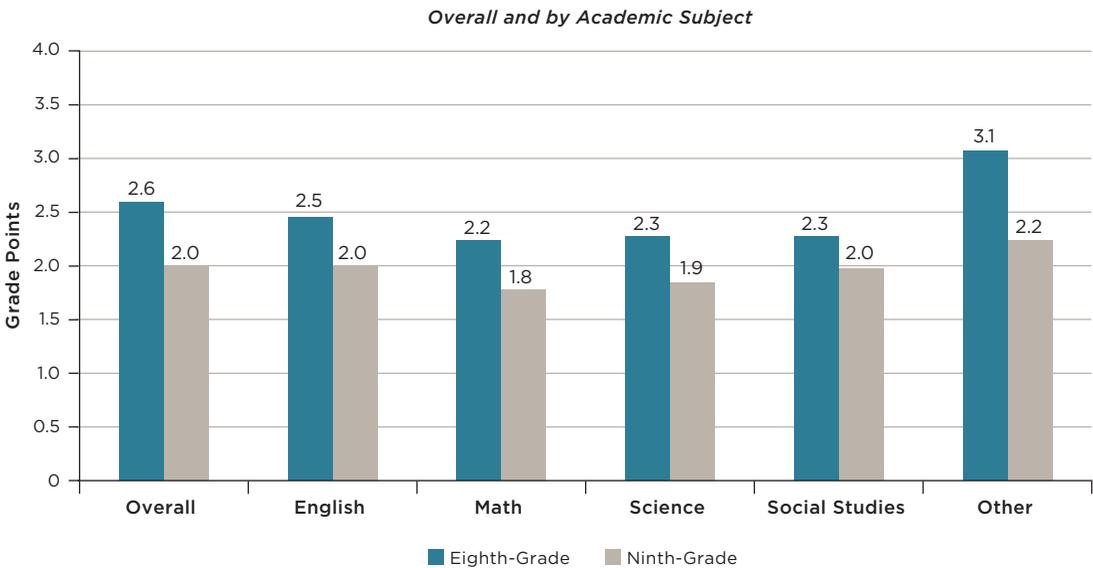
## Course Grades Decline When Students Move From Eighth Grade to Ninth Grade

Students' average grades for all courses drop by more than half of a letter grade (0.6 points on a 4-point scale) when students move from eighth grade to ninth grade. This decline in grades occurs across all subjects, in both core courses and non-core courses (see Figure 1). The extent of the decline is similar for girls and boys, as well as across white, Latino, and African American students. Only Asian students show a smaller decline in GPA than other students across the transition—a difference of about 0.2 GPA points lower.

The decline in course grades is seen across all performance levels, from high-achieving students to low-achieving students (see Figure 2). The most common eighth-grade GPA category was 2.5 to 3.0—CPS students frequently have C+/B- averages in eighth grade. But most of those students with a C+/B- average in eighth grade had a C average in ninth grade, with a median GPA of 2.11. Even among students with very high GPAs in eighth grade, only approximately one-third maintain a high GPA in ninth grade. The only students who did not have a significant decline in grades were those who already had extremely low grades in eighth-grade students whose grades could not get much lower. In total, 89 percent of students had either equal or lower GPAs in ninth grade than they did in eighth grade. Only about one in 10 students improved their GPA between eighth grade and ninth grade.

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**FIGURE 1**  
Overall GPA and course grades decline from eighth grade to ninth grade



**Note:** Same students followed from eighth to ninth grade. Eighth-grade GPA is from the 2007-08 school year, while the ninth-grade data is from the 2008-09 school year with the same students included in the averages for each year. This is the same time period we interviewed students for the qualitative portion of the project. GPA is calculated on a 4-point scale, where an A is 4, B is 3 points, C is 2 points, D is 1 point, and F is 0 points. The gap between eighth-grade and ninth-grade GPA remains for the more recent 2011 freshman cohort. Their eighth-grade GPA was 2.86 compared to their ninth-grade GPA of 2.34, for a difference of 0.52 GPA points.

## Grades Drop, but Not Because the Work is Harder

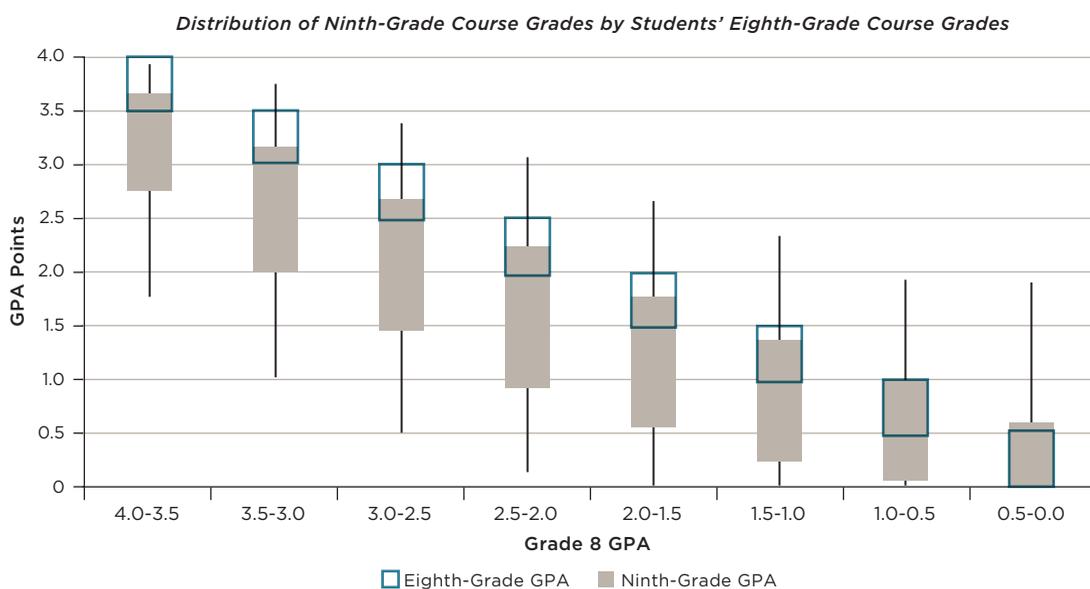
On average, the work that students are asked to do in ninth grade is not harder than in eighth grade.

We conducted a longitudinal study of students, following a sample of eighth-graders in neighborhood schools to the tenth grade. Researchers observed students' English and math classes each year, documented the tasks that students were asked to do, and interviewed students several times each year about those classes. We also examined students' responses on district-wide surveys from 1997 to 2009 that asked students about their classes. We

compared what students said about their classes in the middle grade years to their responses to the same questions on surveys they took while in high school. Both sources of information showed the same thing—classes were not more difficult in ninth grade than in middle school for most students. In fact, students reported that ninth grade was less academically demanding than middle school. Another brief in the *Free to Fail* series, *Classroom Instruction Across the Transition to High School* provides more information on these patterns.

**FIGURE 2**

**GPA declines regardless of the level of eighth-grade GPA**

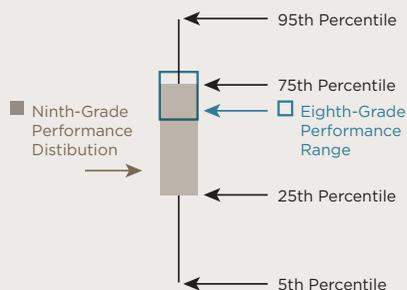


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**Note:** Same students followed from eighth to ninth grade. The eighth-grade GPA categories are from the 2007-08 school year, while the ninth-grade data is from the 2008-09 school year with the same students included in the analysis for each year. GPA is calculated on a 4-point scale where an A is 4 points, B is 3 points, C is 2 points, D is 1 point, and F is 0 points.

### How to Read This Graph

This figure shows the distribution of eighth- and ninth-grade GPA based on students' eighth-grade GPA. The figure is divided into eight groups based on students' eighth-grade GPA. For each group, the blue outline represents the range of the eighth-grade GPAs while the solid box shows the GPA distribution in ninth grade for those same students.



## Attendance and Study Habits Decline From Eighth to Ninth Grade

Doing well in school requires that students put forth consistent academic effort. Numerous studies across the country have shown that time spent on homework is strongly associated with students' grades.<sup>8</sup> The 2007 UChicago CCSR report, *What Matters for Staying On-Track and Graduating in Chicago Public Schools*, found that student academic behaviors such as attendance and studying are far more important in determining whether ninth-graders pass their classes than student background characteristics (e.g., race, gender, and poverty) when entering high school.<sup>9</sup> In fact, strong effort can help students entering high school with low test scores outperform their higher-achieving peers who display weak effort.<sup>10</sup>

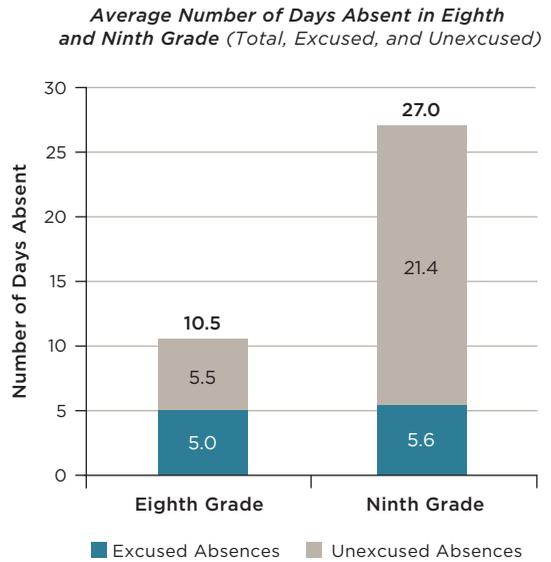
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As students move into high school, attendance and study habits significantly decline. Students miss almost three times as many days of school in ninth grade as in eighth grade (see Figure 3). This increase is primarily driven by an explosion in the number of unexcused absences, which is nearly four times larger in ninth grade than in eighth grade. In 2008-09, the typical ninth-grader missed 27 days of school, with 21.4 of those days due to unexcused absences.<sup>11</sup>

Not only do students miss more classes in high school than middle school, but they also report putting in less effort. We asked the 2008-09 ninth-grade cohort survey questions about whether they study for tests, regularly set aside time to study, and place studying ahead of socializing. They answered the same questions two years earlier,

FIGURE 3

Unexcused absences quadruple in ninth grade compared to eighth grade



**Note:** Same students followed from eighth to ninth grade. Eighth-grade absences are from the 2007-08 school year, while the ninth-grade data is from the 2008-09 school year; the same students were included in both years.

on a survey given in the spring of 2007, when they were in seventh grade. As shown in Table 1, students were slightly less likely to strongly agree with a question about whether they set aside time for homework and studying in ninth grade than they reported two years earlier when they were in seventh grade (13 percent compared to 16 percent).<sup>12</sup> They also were slightly less likely to strongly agree with a question about whether they try hard on their schoolwork, even if they find it boring (18 percent compared to 27 percent).

### WE DEFINE ACADEMIC EFFORT AS:

- Attending Classes
- Paying Attention in Class
- Participating in Class
- Completing Homework
- Seeking Help When Needed
- Studying

**TABLE 1**

**Student responses in high school about studying are less positive than their responses to the same questions when they were in middle school**

	Percent of Students Answering “Strongly Agree”	
	In Middle School	In High School
Set aside time for homework and studying	16%	13%
Try hard on schoolwork, even if it is boring	27%	18%
When need to study, do not go out with friends	17%	12%
Always study for tests	13%	10%

**Note:** Data from the middle school year come from the 2007 survey, while the high school data come from the 2009 survey. The figures are based only on students who answered the survey questions in both years.

## Declines in Academic Effort Explain the Decline in Grades

Grades plummeted in large part because effort (see blue box on p.4) declined substantially across the transition. On average, students’ grades in English and math drop by just under a half of a GPA point from eighth to ninth grade (0.45 in English and 0.40 in math). By far, the largest factor contributing to changes in GPA is the number of days missed from school (see Figure 4). Absences explain three-fourths of the drop in English and math grades (72 percent in English and 78 percent in math). When combined with differences in study habits, which also decline from eighth to ninth grade, about 90 percent of the difference in GPA points is explained. Other factors, such as students’ prior test scores and race/ethnicity, had no relationship with the decline. This suggests that if students had shown up and worked as hard in ninth grade as they did in eighth grade, their grades would likely have remained the same across the transition to high school.

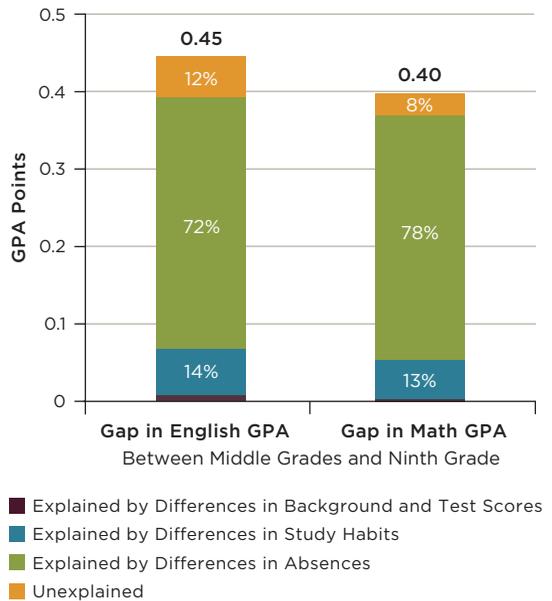
## Less Adult Monitoring at School Makes It Possible For Students to Reduce Effort

Through our qualitative work (see *How We Studied the High School Transition* on p.12), we found adult monitoring declines precipitously across the transition, making it easier for students to miss classes and reduce their study effort in

**FIGURE 4**

**Declines in grades are explained by the increase in absences**

*Gap in GPA Between Middle Grades and Ninth Grade, and Which Variables Account For It*



**Note:** Analysis is based on eighth- and ninth-grade students in the 2008-09 school year who answered CCSR surveys in the spring of 2009. GPA is calculated on a 4-point scale where an A is 4 points, B is 3 points, C is 2 points, D is 1 point, and an F is 0 points. The GPA difference in this figure is not the same as the GPA difference in Figure 2 because this is a different group of students (survey respondents).

high school. When reflecting on their eighth-grade experiences, ninth-grade students described how adults in the school tightly regulated their in-school behavior in middle school. For instance, students often recounted “walking the line”—going to class, lunch, or the restroom in groups

with adult supervision. If they wanted to travel in the school outside of a supervised group, they needed to get adult permission. Overall, students described elementary school as having many explicit rules. As one student griped, “[*In eighth grade*] you need to ask permission to do everything.” These student reflections match researchers’ observations of students’ experiences in middle school, where many students were in self-contained classrooms or moved to different classes as a supervised group.

In contrast, what immediately struck students about high school was the latitude they were given to travel through the school building independently. “*We get to go to our classes, like by ourselves,*” one student shared, “*and it’s cool.*” Another student said, “*There’s more freedom at [high] school. Like for lunch you can actually go out for lunch and go to the library. Or go to the computer lab and use the computers. You’re on your own.*” High school affords students a degree of physical autonomy not experienced in eighth grade. Virtually every student appreciated the new freedom and independence when they entered high school as it made them feel more like a young adult.

With less adult monitoring, however, it became easier for students to do what was virtually impossible in eighth grade: skip class. Students pointed out that with so many students in the building, it is hard for adults to tell where any one student should be at a given time. As a result, it takes little effort to skip class for other activities: “[*In ninth grade*] the security guards are not like ‘*Go to class! Go to class!*’ If you want to just go to the library or something, just chill in the hallway and they’ll think you’re probably on lunch or something.”

The decrease in behavioral management, and the ease with which students could miss class, changed how students thought about class attendance. Whereas in eighth-grade attendance was considered an enforced obligation, in ninth grade it became a choice—something individual

students chose to do, or not to do, based on personal motivation and interest:

In [*elementary school*]...you still walk around in groups, you walk in a line. In [*high school*] you just walk. It’s your choice to go to lunch or English or all those classes. In [*elementary school*] you gotta go to all those classes. You get a choice in [*high school*]...It’s more free.

[*In ninth grade*] you have a choice either to go to class or you don’t go to class, and nobody’s going to be on you to go to your classes in high school. But in [*eighth grade*] you can’t do nothing, you just go to class and that’s it.

The reduction in monitoring goes beyond whether students go to class. Students also reported that teachers no longer “*made*” them do their classwork in ninth grade. Instead, they were now responsible for motivating themselves to pay attention and complete assignments. As one student explained:

[*The biggest difference between teachers in high school and elementary school*] is that teachers in eighth grade pushed us more to work and stuff like that. And they were always, like, on us to do our work, do our work, do our work. And then [*in ninth grade*], they’re like, ‘You know what, we try our best to tell you guys do your work. You guys don’t want to do it, then it’s up to you guys.’

Students’ perceptions closely mirrored how many teachers talked about students’ responsibility for staying on-task. For example, a high school English teacher remarked that ninth-grade

students are growing up and now need to realize the repercussions of their actions:

I give them time every day to do the [class]work. I don't accept if they come in the next day and say I didn't get it, because it's their choice. That's their part of the responsibility. They have 20 minutes to decide if they want to do their work and get a good grade or if they want to mess around. And that's ok, so you're going to take a zero, that's your choice.

As these comments illustrate, adults in high school are less likely to take responsibility for managing students' academic behavior than they were in eighth grade. School staff members no longer either directly control students' movement in the building or make students participate in class and make sure students complete their homework. Thus, students move from a school environment where it takes significant and intentional effort to opt out of learning routines to one where they must voluntarily opt into them. Unfortunately, many students respond to this change by missing more school; they cut back on studying and on getting their work done.

### School and Teacher Practices Make a Difference in the Course Grades Ninth-Graders Receive, Even Among Students With Similar Prior Performance

In almost every high school in the city, the average GPA for students in ninth grade is lower than the average eighth-grade GPA for those same students. However, the degree to which they decline varies greatly across high schools. At some schools, students' ninth-grade grades are not much lower than they were in eighth grade. At other schools, however, the average GPA drops by one GPA point or more from what students received in eighth grade

(see Figure 5); thus, the particular school that a student attends can make a difference in the degree to which the course grades of students will drop.

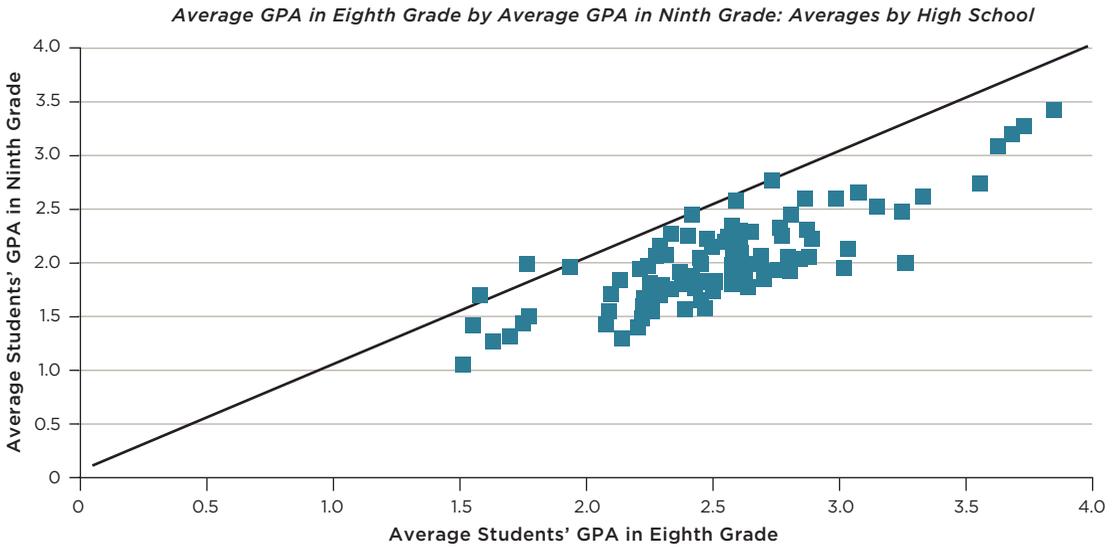
While the decline in GPA for ninth-graders varies across schools, teacher practices within schools also matter for the course grades of students. Within the same school, students with the same eighth-grade course grades show a wide variability in the average ninth-grade course grade by classroom (see Figure 6). Figure 6 shows the difference in grades a C student in eighth grade will get in different classrooms in three neighborhood high schools which served very similar student populations in terms of eighth-grade GPA average (an average of 2.4 GPA points in eighth grade for their incoming ninth-graders).

Depending on the classroom that students attend for their ninth-grade classes, the final course grades can differ by as much as 1.5 GPA points for students who had a similar incoming GPA from eighth grade. For example, in School A, students with a C average in English in eighth grade could get a very low-average course grade of just above 1.0 in English I in the fall. In the same school, students with the same eighth-grade course performance can get almost an average English I GPA of 2.5 by attending a different class in the same school. Similar variability is observed in the algebra classes.

The three schools in the chart, which were chosen at random, illustrate different possible patterns. School A shows that the GPA spread between classroom is almost equal between their English I classes and their Algebra I classes, but the average grades for the Algebra I classes are generally lower than the average grades for the English I classes. For School B, the GPA spread is equal but more compact than the spread is for School A. Unlike School A, the Algebra I classes in School B generally receive better average grades than do the English I classes. School C shows that the GPA spread can be different in the same school for different subjects, as the spread for English

**FIGURE 5**

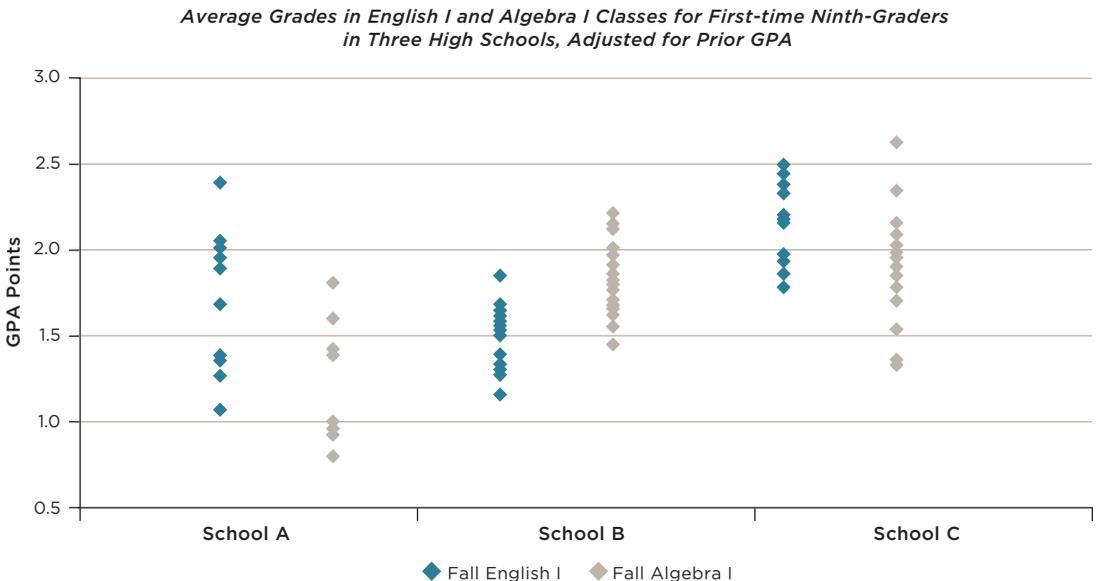
**GPAs decline in ninth grade at almost all high schools**



**Note:** Figure 5 shows the average GPA of first-time ninth-grade students in all the non-charter high schools in the system and compares their ninth-grade GPA to their eighth-grade GPA in the prior year, from wherever they attended middle school. Each square represents a high school. The line in the middle is an identity line — at schools on the line, students receive about the same grades in ninth grade as they did in eighth grade. The vast majority of the squares are below the line because ninth-grade GPAs are lower than eighth-grade GPAs for students at almost all high schools. Yet, there are differences in the degree to which grades decline across schools, and these differences can be quite large.

**FIGURE 6**

**Ninth-grade grades differ by more than one GPA point across classes, among students with the same eighth-grade GPA**



**Note:** Figure 6 shows the average grades in each ninth-grade fall semester English and Algebra I class in three schools serving ninth-graders with similar eighth-grade GPAs. Each diamond represents a classroom in the school with first-time freshmen in 2008-09. The placement of each diamond on the vertical axis shows the average course grade in the classroom, adjusted through statistical models for differences that can be attributed to students' eighth-grade GPA, relative to students with a 2.4 or C average in eighth grade. Adjustments for prior grades come from models that include all first-time ninth-graders in the district (approximately 39,000 students in 2,200 classrooms in 105 schools), not just students in these three schools.

I classes is more compact than is the spread for Algebra I classes.

In sum, students' grades are strongly affected by their high school context, as well as by their experiences in individual classrooms with individual teachers. The ways that teachers and schools monitor students and provide instructional support may help to explain these differences.<sup>13</sup>

## Teacher Support Can Sustain Student Effort and Grades

Pass rates, grades, and student attendance are better at schools and classrooms where students report high levels of student-teacher trust and teacher support.<sup>14</sup>

When describing what constitutes support, students rarely mention emotional support or personal connections. Instead, three key characteristics of the most helpful teachers emerged from their interviews. First, they provide students with individualized attention around the specific academic problems with which they are struggling. Second, supportive teachers monitor students' work, provide regular updates on their progress, and inform them of ways to improve their grade. Finally, they teach material, concepts, and procedures in ways that are clear and understandable; in the students' words, they "*explain things right*," and are willing to cover materials several times and in several ways.

The experiences of Melinda provide a good example of how supports can change a student's trajectory. In eighth grade, Melinda was a C math

student who sometimes struggled to do her work. She also missed five days of schools during the year. As a ninth-grader, however, she bucked the trend, never missing math class during the first three quarters, receiving a B in algebra, and describing algebra as her favorite class. When asked to explain her improvement, Melinda pointed to her ninth-grade teacher.

Math was so hard for me in eighth grade because the teacher didn't know how to explain things right. So, I wasn't learning anything. Now in ninth grade, algebra is simple because I have a teacher that teaches me well. When she puts notes on the board, she explains the notes word for word, and she shows us exactly what we have to do. And if we don't understand it, she shows us again so that we do understand it. She's not, like, "Ok, this is what you gotta do," and throws a book in your face and makes you do the work.... She breaks it down the best she can, and then if we still don't get it, she'll show it to us a different way so that we do understand it.

Melinda's improved instructional experience and grasp of algebra had two important effects. First, because the work seemed easier, Melinda felt more engaged in math:

### WE DEFINE TEACHER ACADEMIC SUPPORT AS:

- Clear Explanations
- Regular Updates on Progress
- Help With Specific Academic Problems

These factors emerge as important from both qualitative interviews of students and from quantitative analysis of large scale surveys. See *How We Studied the High School Transition* on p.12 for a description of the data sources for this research brief.

Now that I'm understanding it, I just love coming to algebra. But when I used to go to math in eighth grade, I didn't look forward to it, because I didn't like the teacher, and I didn't like the way he taught.

Second, not only did Melinda's emotional engagement improve, but her work habits improved as well.

My ninth-grade teacher explains everything so well that, when she gives me the work, I know exactly what to do. But when I was in eighth grade, it was different. I didn't know what to do at all. I never even did my homework in eighth grade. Now I always do my homework.

By providing clear instruction, noticing when Melinda needed help, and giving her assistance, Melinda's teacher made her feel that she could succeed. There is a long line of research on self-efficacy that shows students do not put in effort when they do not think there will be a payoff.<sup>15</sup> Because she was assigned a teacher who taught material in a clear way and provided support, her understanding and confidence improved. That, in turn, led Melinda to increase the amount of effort she put into her class. Thus, the type of instructional support students receive can have a critical impact on their grades by affecting the amount of effort they put into coursework. Those behaviors directly affect their grades.

## School Structures Can Prevent Declining Academic Behaviors

School policies can promote effective monitoring and support of academic behaviors, beyond the efforts provided by individual teachers. As an example, one neighborhood school in the city had

an attendance rate similar to the most selective schools in the city in the year we did this study, even though its ninth-graders had eighth-grade test scores and grades that are fairly average in CPS. The school principal described three key strategies they used to promote attendance.

**The first strategy** was to rearrange the school day to prevent tardiness from becoming an absence. The school moved the advisory period to the first thing in the day. As the principal said, *"...(if) they're in before the first period class so that way it helps them not get a failing grade in those classes. That way attendance would not be the factor."*

**The school's second strategy** for increasing attendance was to have every teacher call home when a class was missed. The purpose is to convey the message that the parents are partners with the high school. As the principal said, *"...teachers have a responsibility to call home...not just the division teacher, but all the classroom teachers and my attitude is...I'm not letting you fail them because we're supposed to get the parents to come in, intervene."*

**The third strategy** the school employed was to create a discipline policy that did not drive students away from school. School leaders wanted to reduce the days missed due to suspensions because they believed that suspensions can lead to increased absenteeism. According to the principal, *"...(we) need to work with these students, you cannot say, 'so what let it go, good riddance he hasn't come for 18 days.' No, we can't do that...we have to take that time to know what it is."*

At another school, the on-track coordinator reached out to students who got an F in the middle of the semester to get the students back on track. She arranged meetings with teachers and parents to find out why students were failing and to come up with a plan to make sure students would pass their classes. One student described how, after several absences, *"they called my mom and told her [I was missing class]."* After a meeting between the student's mother and teacher, she promised

her mom, “*I would stop [cutting]. Now I go to class and do my work. I have an A now.*” This school had grades that were higher compared with schools serving similar students that particular year. Grades dropped in ninth grade by about half as much as typical at this school than at others—comparing students with similar eighth-grade grades and test scores.

## Summary

Low student effort and declining grades are school organizational problems. When a large group of students go from attending class, completing homework, and receiving good grades in eighth grade, to skipping class and getting behind in homework in ninth grade, this signals that teachers’ practices and school structures are key contributors to the decline in student performance. Without strategies for promoting effort and addressing declines, students are free to fail just as they start their high school career. This undermines their chances of graduating four years later and pursuing a college degree.

Currently, ninth grade is often structured in such a way that students feel it is their choice to opt in to academic routines. Coming to class, turning in homework, and asking for extra help are all voluntary activities. Many ninth-graders, however, are not ready to assume complete responsibility for managing their own academic behavior. Students interpret the lack of monitoring and adult supervision of their academic behavior to mean that work effort is a choice rather than a responsibility. Few students report consistently exerting academic effort, and teachers complain that their strategies to increase effort—which often consist solely of encouraging students to work harder—are not very effective.

Ninth-grade, therefore, can end up sorting students based on whether they have strong work habits and supports, rather than helping them develop strong work habits. While we expect 14-year-olds

to take responsibility to get their work done by themselves, ninth-graders are adolescents juggling new roles and responsibilities in multiple spheres of their lives. They need to learn how to manage their time and effort in school, but schools are not necessarily set up to teach them how to do this if they are unable to figure it out on their own. Lucky students—who are easily self-motivated, have supportive teachers, or have families that are monitoring their performance—end up succeeding in ninth-grade classes and are on the path to graduation. Unfortunately, not all students have these advantages.

Structuring classrooms and academic routines so students have to opt out of engagement is one way to minimize declines in academic behaviors and grades. An example of this can be seen in a study on early college high schools—small schools that provide both high school and college classes to students underrepresented in college. Edmunds et al. (2012) found that early college students had better attendance and higher levels of engagement compared with similar students at other schools, in large part because the early college high schools “*mandate engagement.*” By creating structures, instructional experiences, relationships, and supports that make it difficult for students to disengage from schooling, they increase the number of students staying in school.

Another way to minimize declines in academic behaviors is to create monitoring systems for identifying students who are withdrawing and reach out before students fall far behind.<sup>16</sup> Individual teachers can closely monitor performance and create systems that provide immediate feedback when students’ grades fall. Some teachers create checklists for students to keep track of the work they have and have not completed. Some update grade reports weekly or more often, so students know right away when their grade slips. These practices help teachers identify students for support, and also help create classrooms where students stay engaged and are less likely to be off-task.<sup>17</sup>

While individual teachers can monitor and intervene with students who are withdrawing, sometimes students fall through cracks. Schools can set up centralized data for monitoring students so they are not completely reliant on the efforts of individual teachers. These efforts can also help individual teachers identify students who need help. Data reports, such as the CPS “Freshman Success” reports which flag students showing signs of failure and poor attendance, make it easy for teachers and other school staff to identify students in need of help. At some schools, teams of teachers meet and develop strategies for specific students. At others, counselors bring together teachers, parents, and students to develop plans for improving students’

attendance and grades. Schools can also use data to assess how well they are serving different groups of students and develop strategies for supporting students facing similar challenges. In fact, attendance improved in CPS from an average of 27 days missed of school in ninth grade to an average of 20.8 days since the introduction of the “Freshman Success” report in 2009.

For eighth-grade teachers, preparation for high school is not just about developing students’ academic skills and making sure they pass tests; it is also about preparing them for the increased responsibility of high school. It is difficult to successfully prepare students for a new context before they experience it. But at the very least, students and their families could be made aware of the

## How We Studied the High School Transition

This research brief draws on findings from the *Focus on Freshmen* project—a multi-method study examining factors associated with freshman-year course performance in the Chicago Public Schools (CPS). The research uses quantitative data from district-wide administrative records, and biennial surveys of all teachers and students in grades 6-12. It also uses qualitative data on students and teachers in nine neighborhood schools.

**The quantitative analysis is based on all schools in the district that serve eighth and ninth grades.** CPS student administrative records provide data on school enrollment, test scores, grades, and attendance for students across the system. In addition, we use survey data from the UChicago CCSR biennial district-wide survey administered to students and teachers. Through Rasch analysis, different measures of school climate, academic expectations, and students’ academic effort are created using responses to different items from the survey.

Quantitative analysis presented here is both descriptive and based on statistical models that take into account different student characteristics. Analyses that compare survey measures over time are based on hierarchical linear models

that take into account the measurement error and the clustering of the data. These models control for gender, race/ethnicity, whether students were old for the grade, whether they were receiving special education, whether they were classified as limited English proficient, their test scores, and yearly dummies in order to estimate the changes in students’ responses from middle grade to high school. These analyses used data from surveys from 2007 to 2009. The total number of survey responses used across this time span was approximately 700,000 student surveys.

Analyses that look into reasons for differences in grades between the middle grade years and ninth grade are based on a cross section of students in those grades in the 2008-09 school year. These models control for gender, race/ethnicity, whether students were old for the grade, whether they were receiving special education, whether they were classified as limited English proficient, and their test scores. Also, absences and study habits measures are in the model to determine how much these variables explain the differences in grades. The analysis is based on hierarchical linear models where the clustering of the data based on the schools students attend is taken into account. This analysis used the eighth- and ninth-grade data for approximately 22,000 students who attended CPS in both their eighth- and ninth-grade years.

changes in expectations around responsibility in high school and the common pitfalls for students in the ninth-grade year. Families also have a role in monitoring students as they transition into high school to make sure they stay on-track throughout ninth-grade. This does not mean teachers or families should take responsibility away from students, but that adults should monitor students closely and intervene right away if they fail to meet expectations around academic behaviors.

In sum, systems that monitor student engagement and proactively respond to withdrawal can help schools change practices that allow students to exert minimal academic effort and receive poor grades. When teachers and school staff reach out to students to find out why they have missed class

or fallen behind in their work, it shows adults care about the student as a learner and allows whatever is keeping the student from engaging in learning to be addressed. This is a first order task. If students do not participate in academic routines, other reforms, such as addressing curricular rigor or increasing graduation standards, have little chance of succeeding. When schools effectively support academic effort, students respond positively and can even improve on their eighth-grade performance in high school. As the old saying goes, “*showing up is half the battle.*” Finding ways to support academic effort will go a long way towards helping students succeed during the high school transition and stay on the path towards college.

Variation in grades across classrooms is analyzed with data from the 2008-09 school year for students attending English I and Algebra I classes representing approximately 39,000 students in 2,200 classrooms in 105 schools. The statistical analyses are based on hierarchical linear models that take into account the clustering of the students' grades in classrooms and schools. Variables included in the analysis are prior eighth-grade grades in English or math as dummy variables for each grade.

**Qualitative analysis was based on a sample of students enrolled in neighborhood schools, who were followed from eighth to tenth grade.**

The sample of students was chosen from four elementary/middle schools that had strong feeder patterns from eighth to ninth grade with five neighborhood high schools.

Students were selected to participate based on their seventh-grade scores on the Illinois Standards Achievement Test (ISAT) and their grades; we over-sampled middle-achieving students. We did not include students with very weak seventh-grade test scores and grades, or very high test scores and grades, as we wanted to study students whose ninth-grade course performance could not be strongly predicted by

prior performance (i.e., students who would almost certainly pass or fail their ninth-grade courses). We selected more eighth-grade students for our sample than we planned to follow through the study, expecting that not all would enroll in one of the five study high schools in the following fall. In the end, we followed 52 students through the duration of the project. Each student was interviewed twice during their eighth-grade year, four times during their ninth-grade year, and once during their tenth-grade year through in-depth, semi-structured interviews, conducted between May 2008 and May 2010.

We also conducted 105 classroom observations of the students' eighth- and ninth-grade English and math classes. Classes were observed twice while students were in eighth grade and twice again when they were in ninth grade. After each classroom observation, we interviewed the classroom teacher about the lesson that we observed, and about their general strategies and goals for supporting student achievement in that class. Finally, we interviewed 14 administrators and school leaders across the five high schools about school policies and strategies around discipline, remediation, and supporting student achievement in the ninth grade.

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## Endnotes

- 1 Allensworth and Easton (2005, 2007).
- 2 Benner and Graham (2009); Eccles et al. (1991); Heck and Mahoe (2006); Reyes et al. (1994); Roderick (1993, 2003); Seidman et al. (1996); Simmons and Blyth (1987); Weiss and Bearman (2007).
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- 8 Cooper et al. (2006); Keith et al. (1993); Peng and Wright (1994).
- 9 Allensworth and Easton (2007).
- 10 Allensworth and Easton (2007); Keith (1982).
- 11 For this analysis, we show absence data for the academic years that we followed students in our study. Absence rates have improved in recent years, although they still remain high. Ninth-graders in 2010-11 missed an average of 20.8 days of school, compared to 9.0 days in eighth grade.
- 12 The average student scored 0.21 standard deviation points lower on the study habits measure in ninth grade than in seventh grade.
- 13 One might explain variation in GPAs across schools as resulting from more lenient or demanding grading practices. There is very little evidence to support this view, however. Grades in Chicago are a more consistent predictor of college graduation than college examination scores. Roderick et al. (2006). In addition, there is no evidence that average school GPAs are associated with the average school achievement levels. In fact, students across the district struggle to receive As and Bs (Allensworth and Easton 2005).
- 14 Allensworth and Easton (2007); Allensworth et al. (Forthcoming).
- 15 Oyserman and James (2009).
- 16 Allensworth (2013)
- 17 See Allensworth et al. (Forthcoming) for further details of teaching practices that support student engagement.

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