

Recovering Credits in the School District of Philadelphia:

High School Student Credit Recovery Utilization in 2018-19

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and Jason Fontana
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Summary

Nationally, credit recovery has been used as a strategy to encourage and enable students to re-take previously failed courses needed to graduate. The School District of Philadelphia (SDP) offers both in-person and online options for recovering failed or missing credits required for graduation. This study provides a snapshot of the district’s school-year credit recovery utilization—including eligibility, enrollment, and completion—using newly available data for high school students who entered the 2018–19 school year with a record of one or more failed courses.

We first examine credit recovery eligibility in traditional high schools at the end of the 2017–18 school year. SDP high school students are eligible for credit recovery if they failed a course that would have accrued a credit in a core subject area of math, English, science, or social studies. Then, we examine school-year credit recovery enrollment the following school year in 2018–19, among those eligible. Since the goal of credit recovery is for students to re-gain lost credits and get back on track to graduation, we then examine course completion and pass rates among students who enrolled in credit recovery in 2018–19. We also follow students through 2019–20 to examine subsequent course-taking among those who successfully recovered credits the previous year.

There are three things to keep in mind in this report:

- First, we focus on students attending any of SDP’s 52 traditional high schools, excluding students at charter schools or alternative schools (such as evening schools within the SDP Opportunity Network). For this report, we use the term “traditional” high school to refer to schools that held courses exclusively during the day and fit into one of the following SDP categories: Neighborhood, Citywide, or Special Admission high school.
- Second, throughout our analyses, we examine school-year credit recovery utilization by grade level, course subject area, and mode of credit recovery: (1) re-taking the course in full in the traditional, classroom format, (2) taking the compressed credit recovery format of the course in a face-to-face classroom format, or (3) taking the compressed recovery format of a course through the web-based recovery platform.¹ The goal is not to answer what works best but rather to understand utilization patterns.
- Third, our research would be incomplete without shining a light on disparities in course recovery, measured both in terms of student identity characteristics as well as across schools. The goal of SDP is to support all students equitably. This analysis is the first of its kind in analyzing these patterns for a cohort of SDP high school students. We offer disaggregated data as a benchmark against which district efforts to improve equity can be measured.

¹ Some rostered face-to-face classroom formats utilize online platforms to delivery course content. For the purposes of this study, we consider these face-to-face because of the presence of instructional support staff in the classroom.



Key Findings

- Credit recovery needs in the district are high: One-quarter of SDP high school students—and one in three students in Grade 10—were eligible to recover credit in a core course at the end of the 2017–18 school year.
- Of the students eligible for credit recovery, over half were eligible for more than one course. Nearly a quarter were eligible to recover four or more courses (N=2,011), meaning they had effectively fallen an entire year behind.
- During the 2018–19 school year, about half of eligible students attempted to recover at least one credit. Most students who enrolled in credit recovery enrolled in only one course, even if they were eligible for multiple courses.
- Two in three credit recovery course attempts occurred in traditional format (65%), followed by web recovery (23%) and classroom recovery (12%). There were no significant differences in mode of recovery across course subject areas.
- Students completed a large majority of courses attempted (nearly 80%). However, only half of the completed course attempts resulted in a passing grade.
- Pass rates for completed course attempts were higher in traditional course formats (58%), relative to in-person (45%) and web-based (37%) recovery formats (e.g., Edgenuity).
- There are large differences in credit recovery eligibility and pass rates across student subgroups, but not for enrollment in credit recovery, suggesting inequality in the supports for academic success rather than access to credit recovery options. We present these data to serve as a benchmark against which district efforts to improve equity can be measured.
- Schools varied widely in level of need (rates of eligibility), access (rates of enrollment), and success (pass rates). School-specific rates are presented to demonstrate this variability, highlight bright spots where the district might examine opportunities to scale what is working and identify the schools with the greatest level of need.
- Most (88%) non-graduating students who successfully recovered courses succeeded in subsequent courses in the same subject area.

Implications for Policy and Practice

- In SDP’s traditional high school, many students need significantly more support to succeed in core courses. The high percentage of students in traditional schools that fail one or more core courses, coupled with low credit recovery enrollment and pass rates, suggest prevention would be more effective than remediation in its current form.
- To guide a path forward, the district should consider systematically examining and scaling what is currently working in the district and providing more resources for evidence-based practices—such as academic support classes and tutoring—where many students are struggling (U.S. Department of Education 2017; 2018a).
- Pass rates were very low (37%) for students using web-based recovery, e.g., Edgenuity. While this is not definitive evidence of lack of effectiveness, we recommend the district examine the research base for online credit recovery providers being utilized, and perhaps conduct an impact study of existing providers to assess what works.



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- We encourage the district to use this report to examine the bright spots in credit recovery utilization to see if and how successes might be scaled. Models of strong access to credit recovery in settings with high need, for example, might be investigated at Southern High and Strawberry Mansion, where over half of the students were eligible for credit recovery and credit recovery course enrollment was over 70%. Efforts for improving pass rates might be modeled by Robeson, Workshop School, and Motivation High School, where between 75%–100% of students who enrolled in credit recovery successfully recovered credits.
 - This study does not address what credit recovery modes are more effective for getting students on track or whether credit recovery is an effective strategy for improving graduation rates in the district. Rather, the descriptive data presented here can be used to generate more specific research questions about which credit recovery options work best and for whom, and what supports are needed to ensure equity in course completion and pass rates for all students and all schools across the district.

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Why this study

In 2018–19, the School District of Philadelphia (SDP) four-year high school graduation rate was 77.9%, up by 4.9 percentage points from 73% in 2014–15 (Erdem-Akçay, 2020).² Despite these gains, over 2,000 district students still failed to graduate on-time.³ One of the primary reasons for failure to graduate is missing one or more required course credits.

Nationally, credit recovery has been used as a strategy to encourage and enable students to re-take previously failed courses needed to graduate (U.S. Department of Education, 2018b). While research on the efficacy of credit recovery for improving graduation rates is inconclusive (National Center for Education Statistics, 2015), many districts utilize credit recovery programs as part of their overall strategy for supporting students through graduation: Nearly 90% of high schools nationwide offered at least one credit recovery course according to a 2015 survey of high school administrators (U.S. Department of Education 2018b).

SDP offers three different credit recovery modes: (1) re-taking the course in full in the traditional, classroom format, (2) taking the compressed credit recovery format of the course in a face-to-face classroom format, or (3) taking the compressed recovery format of a course through the web-based recovery platform (e.g., Edgenuity). SDP is relatively unique in the number of options offered. While nationally 71% of schools offered online credit recovery courses, less than half of schools offered blended models (46%) or in-person (42%) methods of credit recovery, according to the 2015 National Survey on High School Strategies (U.S. Department of Education, 2018b).

This study provides a snapshot of credit recovery utilization across the district. We analyze newly available data on school-year credit recovery utilization in SDP’s 52 traditional high schools during the 2018–19 school year. We report the level of need for credit recovery across the district by assessing cumulative core course failures through 2017–18. We then examine credit recovery utilization in 2018–19, including enrollment, completion, and pass rates by mode, subject area, and grade level. For students who recovered a credit, we examine subsequent same-subject course enrollment and performance.

District stakeholders can use these findings to inform district and school credit recovery policies. In addition, the descriptive data presented here can be used to generate more specific research questions about which credit recovery options work best and for whom, and what supports are needed to ensure equity in course completion and pass rates for all students and all schools across the district.

² Excluding students in alternative programs.

³ Author calculations from Figure 2 in Erdem-Akçay 2020.



What the study examined

In this study, we explore credit recovery eligibility, enrollment, and completion in the School District of Philadelphia (SDP) using newly available data on school-year credit recovery utilization in 2018–19 for students in traditional high schools who entered that school year with a record of one or more failed courses at any point from 2013–14 to 2017–18.

First, we examine credit recovery eligibility at the end of the 2017–18 school year. SDP high school students are eligible for credit recovery if they failed a course that would have accrued a credit in a core subject area of math, English, science, or social studies.⁴ Then, we examine credit recovery enrollment during the school year among students who were eligible for credit recovery the following school year in 2018–19—the first year that credit recovery information was available. The goal of credit recovery is for students to re-gain lost credits and get back on track to graduation. We examine course completion and pass rates among students who enrolled in credit recovery in 2018–19. We also follow these students through 2019–20 to examine subsequent course enrollments among those who successfully recovered courses the previous year.

We close this report with a focus on equity, examining student and school variation in credit recovery eligibility, enrollment, and pass rates. We discuss implications for the district and school policies and practices as well as the next steps for research.

Research Questions

The research questions guiding this report are as follows.

1. How many students were eligible for credit recovery in 2017–18? How many eligible students enrolled in credit recovery in 2018–19?
 - a. Did the rates of eligibility or enrollment vary by student or school characteristics?
2. How many students passed their credit recovery courses, thus recovered a credit?
 - a. Did success rates vary by course subject and/or mode?
3. Which subjects and courses did students attempt to recover in 2018–19?
 - a. Did the mode of recovery vary for different subject areas?
4. Among students who passed credit recovery courses in 2018–19, how many subsequently enrolled in another course in the same subject area in 2019–20? How successful were those students in passing their next course in the subject?

Limitations

Several data limitations could be addressed in future work on this topic. For this cohort, the data do not allow for an investigation of how patterns differ depending on when during the year credit recovery options are offered, how long after failing a course students typically attempt to recover the credit or credit recovery patterns in non-traditional high schools. Also, in addition to options offered during the school year, the district offers summer options through an in-person summer

⁴ Some school policies also permit recovery in courses beyond those in core subjects. However, this study focuses on core courses only.



academy and web-based courses.⁵ Our data only address school-year credit recovery. These are important gaps that when researched will help provide a fuller picture of credit recovery in the district.

Box 1

Definitions

This study uses:

- **Eligible for credit recovery:** A student was deemed eligible for credit recovery if they failed and had not yet recovered a core course (English, Math, Science, or Social Studies) between 2013–14 and 2017–18.
- **Enrolled in credit recovery:** A student who was eligible for credit recovery and enrolled in that course in either the traditional format or recovery mode during the 2018–19 school year.
- **Traditional mode:** A course being retaken in its original, classroom-based format. This mode is not modified for credit recovery. Rather, the enrolled student is retaking the course in full.
- **Recovery mode:** A course being taken in a compressed, recovery format which includes either (1) in a face-to-face classroom recovery format, or (2) in a web-based recovery format. Most schools, but not all, use Edgenuity as their provider for web-based recovery. Some face-to-face classroom recovery formats also draw on Edgenuity for course content but are rostered classes with in-classroom instructional support.
- **Traditional high school:** Schools that held courses exclusively during the day and fit into one of the following SDP categories: Neighborhood, Citywide, or Special Admission high school. Schools in these categories may provide non-traditional programming, such as project-based learning, early college enrollment, work-based internships, or other innovative approaches, but for the sake of simplicity, in this report, they are all considered “traditional” high schools. Educational Options Programs (EOPs), entire schools serving students with alternative needs (e.g., Widener Memorial School), and other schools in SDP’s Opportunity Network are not included in our analyses.

⁵ The district offers a Summer School program at no cost to students in Grades 11 and 12, and, according to the Office of Research and Evaluation, makes a big push during the summer for seniors to recover any missing credits needed to graduate. In Summer 2020, 48 seniors participated. Alternative summer school options for other students are offered at the student’s expense. Because of data limitations, this study does not include data on summer school credit recovery. See <https://sof.philasd.org/2019/05/24/summer-school-information/> for more information.



Box 2

Data and Methods

This study uses de-identified student-level data for high schoolers in the School District of Philadelphia in 2013–14 through 2019–20. The study was limited to students enrolled in 52 traditional School District of Philadelphia high schools. All identifying information was removed before the research team received the data.

Key variables are:

- **Subject area:** We aggregated to the subject level the courses a student was enrolled in during each year of the study that they were in an SDP high school, including English, math, science, and social studies.
- **Mode of credit recovery:** Indicator for how student was attempting each course enrolled. Options consist of taking the course: (1) in a traditional classroom format, (2) in a face-to-face classroom recovery format, or (3) in a web-based recovery format.
- **Course pass/fail indicator:** Indicator for whether a student passed a course, drawing on letter grade earned in each course a student took at an SDP high school during the study years.
- **High school attended:** The school each student attended for the observation year. For students who attended more than one school each year, we used the last school attended.

This study also includes analysis of student- and school-level characteristics. See Appendix A for definitions of those variables.

Methods of analysis:

This is a descriptive analysis of credit recovery utilization. These patterns are not suggestive of what works best for students. While they provide important information about credit recovery utilization, a different study design is needed to understand student experiences and the academic demand of different credit recovery options, what the short- and long-term impacts are across different approaches, and what supports are helpful for students to be successful.

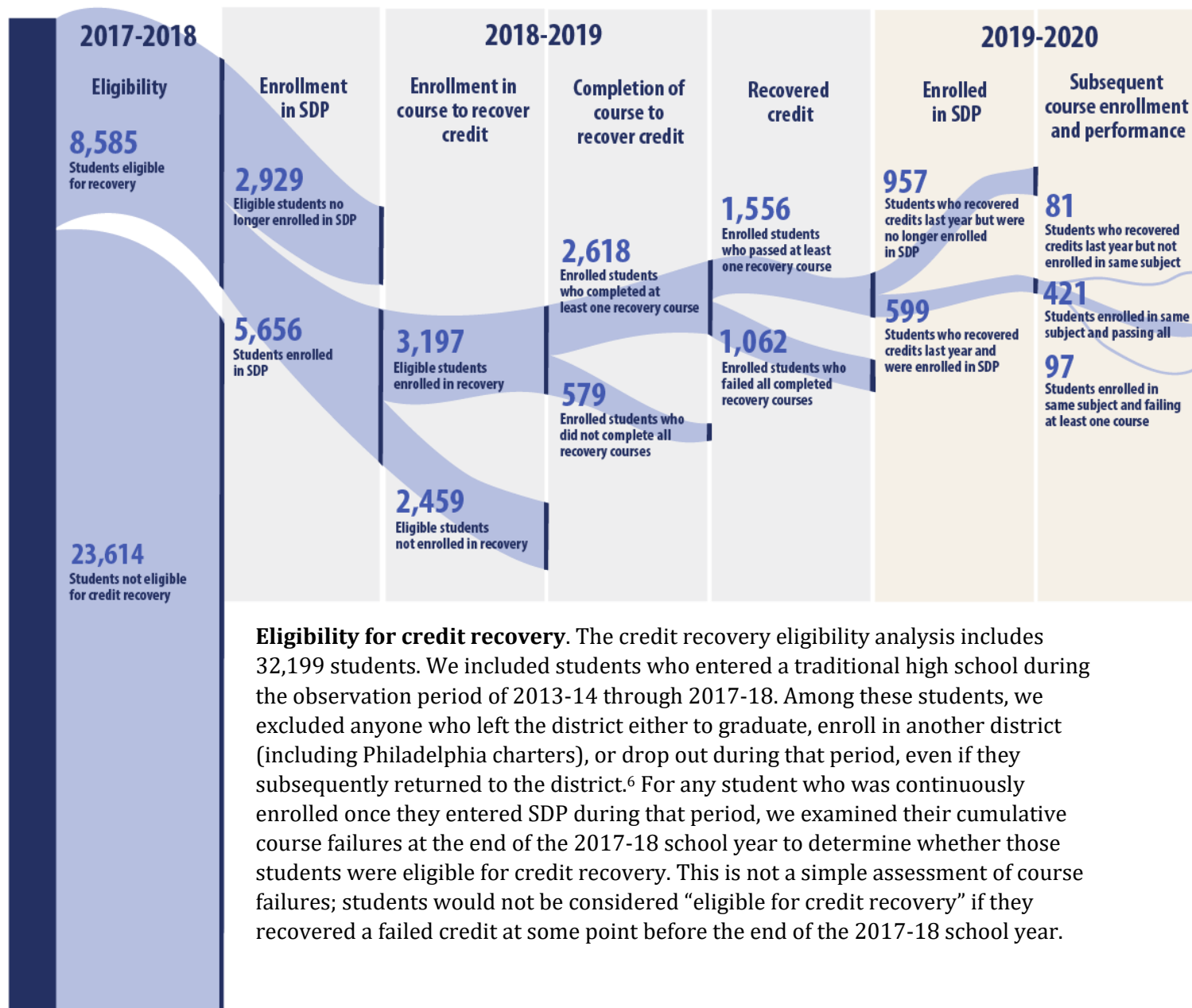


Who is included in this study?

This study examines credit recovery utilization among School District of Philadelphia high school students who were enrolled in any of the 52 traditional high schools in SDP during the study period. Figure 1 below provides an overview of who is included in our analysis throughout the credit recovery pathway, from eligibility through recovery and subsequent course enrollment. As we discuss findings along this pathway, we refer to this figure.

32,199
SDP high school students
enrolled in traditional high schools

Figure 1. Trajectory of credit recovery eligibility, enrollment, and recovery in School District of Philadelphia traditional high schools



Eligibility for credit recovery. The credit recovery eligibility analysis includes 32,199 students. We included students who entered a traditional high school during the observation period of 2013-14 through 2017-18. Among these students, we excluded anyone who left the district either to graduate, enroll in another district (including Philadelphia charters), or drop out during that period, even if they subsequently returned to the district.⁶ For any student who was continuously enrolled once they entered SDP during that period, we examined their cumulative course failures at the end of the 2017-18 school year to determine whether those students were eligible for credit recovery. This is not a simple assessment of course failures; students would not be considered “eligible for credit recovery” if they recovered a failed credit at some point before the end of the 2017-18 school year.

⁶ These students are excluded because we do not have information about their course-taking, credits failed or earned, or credit recovery utilization while out of the district.



Credit recovery utilization. Our analysis of school-year credit recovery utilization includes 5,656 students who ended the 2017–18 year eligible for credit recovery and were still enrolled in SDP traditional high schools in 2018–19. We excluded 2,929 students who were eligible for credit recovery but did not enroll in the district in 2018–19. Excluded students either graduated, dropped out of school, or enrolled in another district.⁷

Following students who passed credit recovery courses. Our analysis of subsequent course enrollment and performance includes 599 students. We follow students who passed credit recovery courses in 2018–19 through the 2019–20 school year to see whether they enrolled in and passed a course in the same subject area. We excluded from the analysis 957 students who passed credit recovery courses in 2018–19 but left the district before the start of the 2019–20 school year, either because they graduated, dropped out of school, or enrolled in another district.

What the study found

How many students were eligible for credit recovery in 2018–19?

To understand credit recovery pathways in the School District of Philadelphia, we begin by examining students' credit recovery eligibility at the end of 2017–18. As discussed above, eligibility for credit recovery is based on cumulative course failures during our observation period, 2013–14 through 2017–18. This analysis includes 32,199 students who entered a traditional district high school during the observation period of 2013–14 through 2017–18, excluding anyone who, during that period, dropped out, graduated, or left for some time and subsequently returned.⁸

One-quarter of SDP high school students—and one in three students in Grade 10—were eligible to recover credit in a core course at the end of the 2017–18 school year.

Figure 2 on the following page shows the percentage of students—overall and by grade level—who ended 2017–18 with a record of failing at least one core course, thus eligible for credit recovery.

Notably, in Philadelphia's traditional high schools:

- More than a quarter of high school students (28%) ended the 2017–18 year eligible for credit recovery based on their cumulative course failures from 2013–14 through 2017–18.
- One in three sophomores (33%) ended the 2017–18 school year eligible for credit recovery, the highest percentage of all grades.
- The least likely to be eligible for credit recovery were seniors.⁹
- Twenty-eight percent of freshmen ended the school year with at least one failed course.¹⁰

⁷ Some students were able to graduate despite missing a core course credit. For example, students need three math credits to graduate. A student with three math credits may have a course failure for a fourth math credit, thus eligible for credit recovery but also able to graduate. Because graduation was not a focus of this study, we did not request exit code data for these students. This means we are unable to report how many students left the district for different reasons.

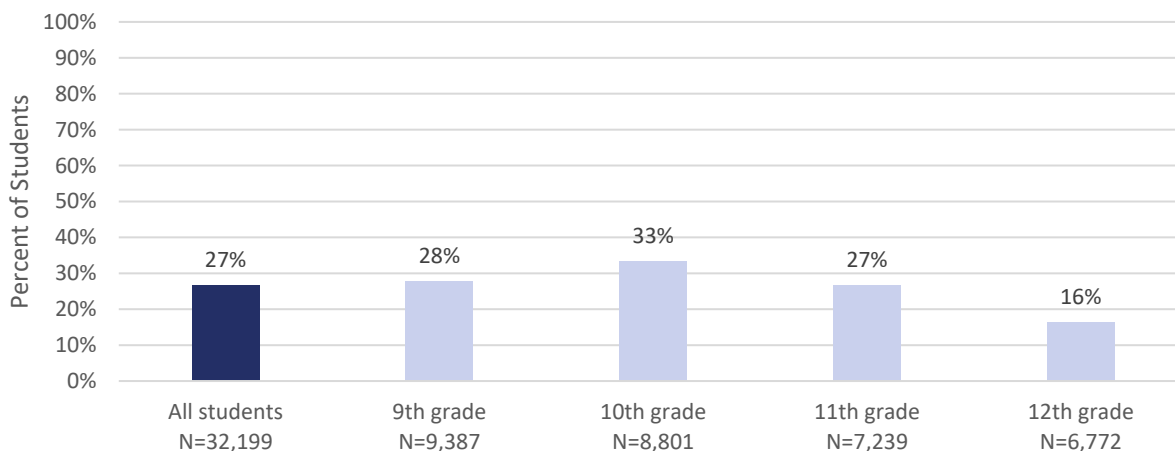
⁸ Those excluded from our sample were more likely to be male than female, receiving special education services than not, and participating in social service programs than not.

⁹ While some seniors would need to repeat the school year in order to regain the credit to graduate, it is likely that others were able to graduate, possibly enrolling in credit recovery in Summer 2018 or not needing the credit to graduate. Because of data limitations, we cannot determine the status of these students.

¹⁰ We have reported elsewhere the importance of course performance in Grade 9 as an indicator of likelihood of graduating on time (Pileggi et al., 2020).



Figure 2. Percent of high school students eligible for credit recovery at the end of 2017–18, overall and by grade level, School District of Philadelphia, N=32,199



Note: Author calculations using administrative data for School District of Philadelphia traditional high school students who first enrolled between 2013–14 and 2017–18 and who did not end a school year out of SDP during the study period (N=32,199). “Traditional high schools” are those that held courses exclusively during the day and fit into one of the following SDP categories: Neighborhood, Citywide, or Special Admission.

More than half of Philadelphia’s traditional high schools ended the 2017–18 year with a quarter or more students eligible for credit recovery.

In Figure 3 on the following page, we show schools categorized by the credit recovery eligibility rate, i.e., the percent of students with at least one unresolved course credit at the end of 2017–18.¹¹ Group 1 (grey), for example, represents schools with low eligibility rates, thus need for credit recovery—with less than 10% of students who ended the 2017–18 year with at least one failed core course credit, thus eligible for credit recovery.

Notably:

- There were relatively few traditional high schools (N=9) with low rates of credit recovery eligibility, including only one school with 0%—Masterman.
- More than half of traditional Philadelphia high schools (N=29) ended the 2017–18 year with a quarter or more students eligible for credit recovery, including seven schools with rates of at least 50%.

¹¹ School-specific 2017–18 credit recovery eligibility rates for all schools can be found in Appendix B.



Figure 3. Groups of schools based on rates of eligible for credit recovery at the end of 2017–18

Credit recovery eligibility rate group	Group 1: Less than 10% eligible	Group 2: 10% to less than 25% eligible	Group 3: 25% to less than 50% eligible	Group 4: 50% or more eligible
Schools (in alphabetical order)	Academy At Palumbo Arts Academy @ Rush C.A.P.A. Central H.S. G.A.M.P. Masterman H.S. Parkway C.C. S.L.A. Swenson H.S.	Bodine H.S. Carver Constitution H.S. F.L.C. Furness H.S. Girls H.S. Hill-Freedman Lankenau H.S. Motivation H.S. Parkway N.W. Phila Military S.L.A. @ Beeber Saul H.S. Vaux High	Bartram H.S. Dobbins H.S. Edison H.S. Fels H.S. Frankford H.S. H.S. Of Future Kensington C.A.P.A. Kensington H.S. Kensington Health Lincoln H.S. Mastbaum H.S. Northeast H.S. Penn Treaty Randolph H.S. Robeson H.S. Roxborough H.S. Sayre H.S. The Linc The U School Washington H.S. West Phila H.S. Workshop School	Building 21 Franklin H.S. King H.S. Overbrook H.S. Parkway West South Phila Hs Strawberry Mansion
Number (%) of schools	9 (17%)	14 (27%)	22 (42%)	7 (13%)
Weighted average school eligibility rate ¹²	5%	15%	36%	54%

Note: Author calculations using administrative data for School District of Philadelphia traditional high school students who first enrolled between 2013–14 and 2017–18 and who did not end a school year out of SDP during the study period (N=32,199). “Traditional high schools” are those that held courses exclusively during the day and fit into one of the following SDP categories: Neighborhood, Citywide, or Special Admission.

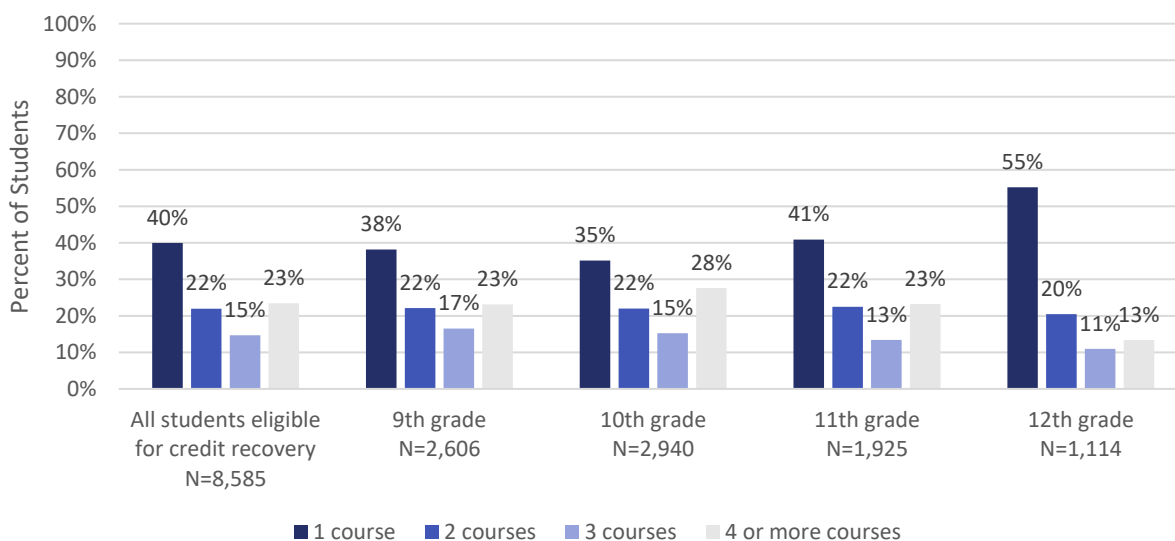
¹² The eligibility rate displayed here is computed by averaging the eligibility rates of each individual school, weighted by the number of students in the sample that attended that school.



More than half of eligible students were eligible for more than one course, and nearly a quarter were eligible for four or more courses, meaning they were at least a year behind their peers.

Figure 4 shows the percent of students eligible for recovery for one, two, three, or four or more credits, among all students eligible for credit recovery based on course credit records at the end of the 2017–18 school year.

Figure 4. Percent of students with a record of 1–4 or more course failures at the end of 2017–18 among all students eligible for credit recovery, overall and by grade level, School District of Philadelphia, N=8,585



Note: Author calculations using administrative data for School District of Philadelphia traditional high school students who first enrolled between 2013–14 and 2017–18 and who did not end a school year out of SDP during the study period, restricted to those eligible for credit recovery at the end of the 2017–18 school year (N=8,585). “Traditional high schools” are those that held courses exclusively during the day and fit into one of the following SDP categories: Neighborhood, Citywide, or Special Admission.

Notably:

- Forty percent of eligible students only had one course to recover. The remaining 60% ended 2017–18 with more than one course to recover.
- Nearly a quarter of eligible students (23%) were eligible to recover four or more courses, meaning they had effectively fallen an entire year behind.
- The number of eligible courses did not differ significantly across grade levels, except that seniors were more likely to only be eligible for one course: More than half of seniors (55%) who ended the 2017–18 school year eligible for credit recovery only had one course failure to recover, compared to 38%–41% of other students.¹³

¹³ This is not a comparison of performance across grade levels. Lower rates for seniors likely reflect a mix of selection (e.g., students with too many course failures may drop out or students with many course failures may be repeating a grade) and more time in high school, thus more opportunities to recover credits.



How many eligible students enrolled in credit recovery in 2018–19?

Next, we examine enrollment in school-year credit recovery courses in 2018–19. Students who failed a course prior to the 2018–19 school year could pursue the following three credit recovery options: 1) re-take the course in a traditional classroom format, 2) re-take the course in a compressed classroom-based recovery format, or 3) recover the credit through an online recovery module.

Enrollment in school-year credit recovery is a strategic decision that must take into account several factors, such as whether the credit is needed for graduation or subsequent course-taking, course availability, and students' knowledge of credit recovery as an option. Taking these factors together, it may be that a student that is eligible but does not enroll is making the best choice for them. However, as we see in this section, there is substantial variation across schools in enrollment, which is suggestive of variation in access to credit recovery options that work for students across schools.

This analysis includes 5,656 students eligible for credit recovery at the end of 2017–18 who enrolled in traditional SDP high schools during 2018–19 and excludes nearly 3,000 students who were eligible but left the district before the start of the 2018–19 year.¹⁴ One-third of those who left were in Grade 12 in the 2017–18 year, so many likely graduated. Among those who stayed were 608 students who were repeating their freshman year in 2018–19 because of missing credits.

More than half of eligible students attempted to recover at least one credit.

Figure 5 shows the rates of enrollment in credit recovery among those eligible, overall and by grade level.

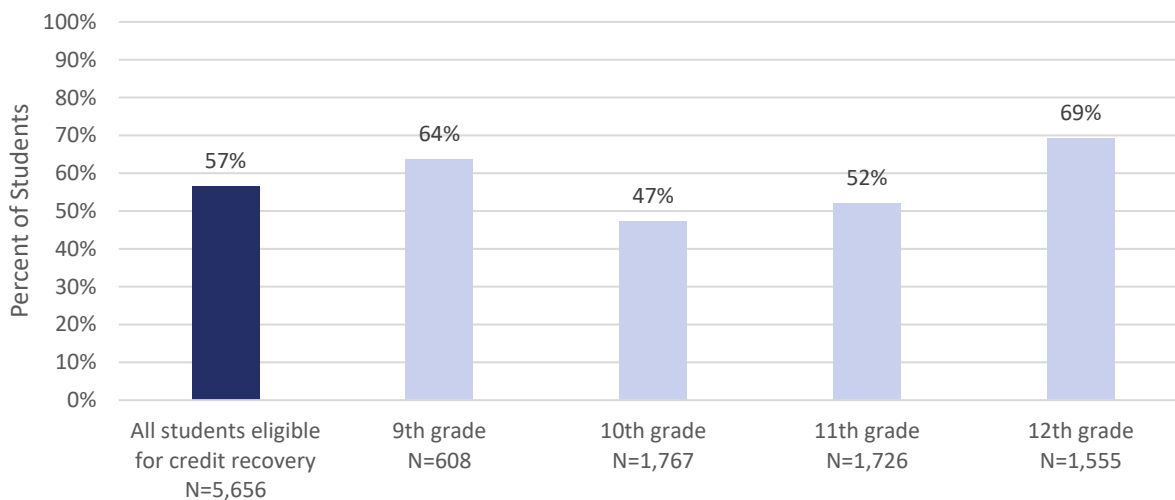
Notable results:

- More than half (57%) of eligible students attempted to make up at least one failed course. Conversely, 43% of eligible students did not.
- A higher percentage of seniors attempted to re-gain credits (69% of those eligible), compared to juniors (52%) and sophomores (47%).
- Many repeating freshmen (64%) enrolled in credit recovery, but over a third (36%) did not.

¹⁴ Students who were no longer in the sample had characteristics that were similar to the analytic sample, except they were less likely to be low-income.



Figure 5. Percent of students who enrolled in at least one credit recovery course among those eligible in 2018–19, overall and by grade level, School District of Philadelphia, N=5,656



Note: Author calculations using administrative data for School District of Philadelphia traditional high school students who first enrolled between 2013–14 and 2017–18, who remained enrolled in SDP in 2018–19, and who did not end a school year out of SDP during the study period (N=5,656). The students in Grade 9 in this analysis are repeating the grade due to previous course failures. “Traditional high schools” are those that held courses exclusively during the day and fit into one of the following SDP categories: Neighborhood, Citywide, or Special Admission.

Enrollment rates among eligible students varied widely by school.

Figure 6 shows high schools categorized by the rate at which their eligible students were enrolled in any credit recovery options, i.e., the percent of eligible students who enrolled in at least one credit recovery course in 2018–19. This analysis excludes Masterman, which did not have any students eligible for credit recovery.

Notably:

- Twenty-one schools enrolled fewer than half of their eligible students in credit recovery, nine of which enrolled less than a quarter of eligible students.
- Only two schools enrolled 75% or more of eligible students: West Philadelphia and Dobbins.

See Appendix C for school-specific enrollment rates.



Figure 6. Groups of schools based on the percentage of their eligible students who enrolled in credit recovery in 2018–19

Credit recovery eligibility rate groups	Group 1: Less than 25% enrolled	Group 2: 25% to less than 50% enrolled	Group 3: 50% to less than 75% enrolled	Group 4: 75% or more enrolled
Schools (in alphabetical order)	Arts Academy @ Rush Bodine H.S. Mastbaum H.S. Motivation H.S. Phila Military Robeson H.S. S.L.A. S.L.A. @ Beeber Vaux High	Building 21 C.A.P.A. Carver Central H.S. Constitution H.S. G.A.M.P. Kensington Health Parkway N.W. Parkway West Saul H.S. The U School Workshop School	Academy at Palumbo Bartram H.S. Edison H.S. F.L.C. Fels H.S. Frankford H.S. Franklin H.S. Furness H.S. Girls H.S. H.S. Of Future Hill-Freedman Kensington C.A.P.A. Kensington H.S. King H.S. Lankenau H.S. Lincoln H.S. Northeast H.S. Overbrook H.S. Parkway C.C. Penn Treaty Randolph H.S. Roxborough H.S. Sayre H.S. South Phila Hs Strawberry Mansion Swenson H.S. The Linc Washington H.S.	Dobbins H.S. West Phila H.S.
Number (%) of schools	9 (17%)	12 (23%)	28 (54%)	2 (4%)
Weighted group average enrollment rate ¹⁵	18%	35%	63%	84%

Note: Author calculations using administrative data for School District of Philadelphia traditional high school students who first enrolled between 2013–14 and 2017–18, who remained enrolled in SDP in 2018–19, and who did not end a school year out of SDP during the study period (N=5,656). The students in Grade 9 in this analysis are repeating the grade due to previous course failures. “Traditional high schools” are those that held courses exclusively during the day and fit into one of the following SDP categories: Neighborhood, Citywide, or Special Admission high school.

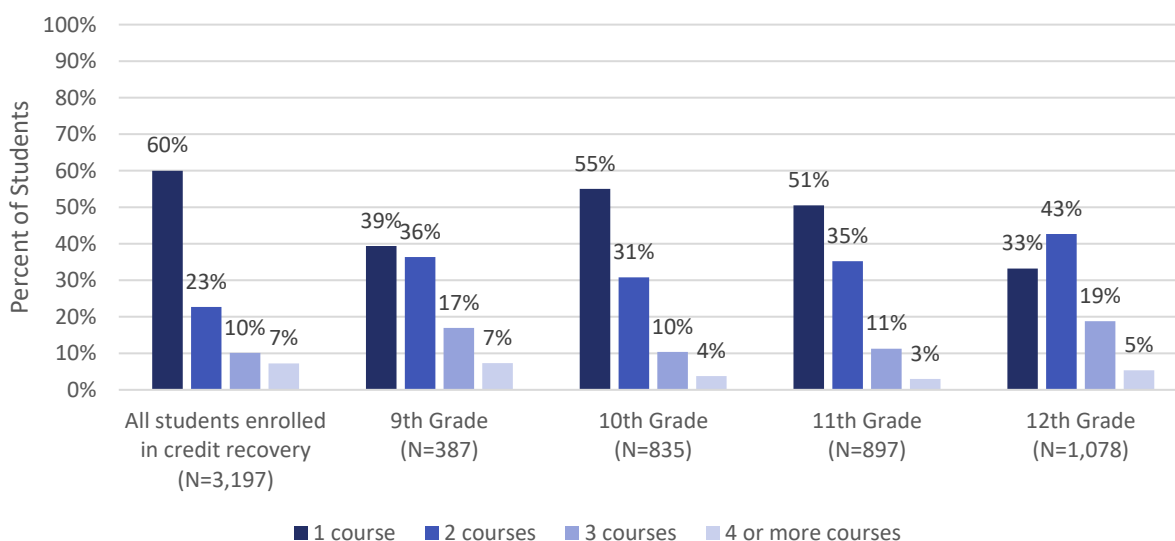
¹⁵ The enrollment rate displayed here is computed by averaging the enrollment rates of each individual school, weighted by the number of eligible students in the sample that attended that school.



Forty percent of students attempting to recover credits in 2018–19 enrolled in more than one credit recovery course.

Students can enroll in multiple credit recovery courses during the school year, depending on need and availability. As shown in Figure 4, many (60%) eligible students had course failures in more than one core course. Here we examine the percent of enrolled students by the number of credit recovery courses attempted, overall and by grade level (Figure 7).

Figure 7. Percent of students enrolled in credit recovery by number of credit recovery courses attempted in 2018–19, overall and by grade level, School District of Philadelphia, N=3,197



Note: Author calculations using administrative data for School District of Philadelphia traditional high school students who first enrolled between 2013–14 and 2017–18, who remained enrolled in SDP in 2018–19, who did not end a school year out of SDP during the study period, and who were enrolled in at least one recovery course (N=3,197). The students in Grade 9 in this analysis are repeating the grade due to previous course failures. “Traditional high schools” are those that held courses exclusively during the day and fit into one of the following SDP categories: Neighborhood, Citywide, or Special Admission.

Notably:

- Most (60%) students eligible for credit recovery enrolled in only one credit recovery course, even if they were eligible for more than one course.¹⁶
- Many students (40%) enrolled in two or more credit recovery courses, and 7% of students enrolled in 4 or more.
- Seniors, though less likely to need to recover more than one course (see Figure 4), were more likely to enroll in more than one credit recovery course (67%) than their peers (45%–61%).

Students attempted to recover credits across each of the four core subjects evenly.

As discussed in Figure 7, 40% of students who attempted credit recovery enrolled in multiple credit recovery courses. In total, there were 5,359 credit recovery course attempts among the 3,197 students enrolled in credit recovery in 2018–19. Table 2 shows the percent of course attempts by subject area and grade level.

¹⁶ There were 1,917 students who enrolled in one recovery course; 900 of those were eligible for more than one course.



Table 2. Number and percent of credit recovery courses attempts in 2018–19, by subject area and grade level, School District of Philadelphia, N=5,359 course attempts among 3,197 students

Credit Recovery Course Subject Area	Overall		9 th Grade		10 th Grade		11 th Grade		12 th Grade	
	N	%	N	%	N	%	N	%	N	%
Math	1,649	30.8%	295	41.7%	480	35.1%	391	27.4%	483	26.0%
English	1,348	25.2%	163	23.0%	303	22.2%	391	27.4%	491	26.4%
Social Studies	1,222	22.8%	140	19.8%	288	21.1%	329	23.1%	465	25.0%
Science	1,140	21.3%	110	15.5%	295	21.6%	315	22.1%	420	22.6%
Total courses	5,359	100.0%	708	100%	1,366	100%	1,426	100%	1,859	100%

Note: Author calculations using administrative data for School District of Philadelphia traditional high school students who first enrolled between 2013–14 and 2017–18, who remained enrolled in SDP in 2018–19, who did not end a school year out of SDP during the study period, and who were enrolled in at least one recovery course (N=3,197). The students in Grade 9 in this analysis are repeating the grade due to previous course failures. “Traditional high schools” are those that held courses exclusively during the day and fit into one of the following SDP categories: Neighborhood, Citywide, or Special Admission.

Notably:

- Overall, the four core subjects of math, science, English, and social studies were fairly evenly represented among the credit recovery courses attempted in 2018–19, with math courses most frequent at 30.8%.
- The relative concentration of math courses in course recovery attempts was most pronounced among Grade 9 (41.7%) and students in Grade 10 (35.1%).
- Five courses accounted for over half of all attempts to re-gain credits: Algebra 1 (14.4%), English 2 (10.6%), Biology (9.9%), African American History (8.9%), and Geometry (8.3%) (analysis not shown).

Which credit recovery modes were utilized by students to re-gain credits and in which subject areas?

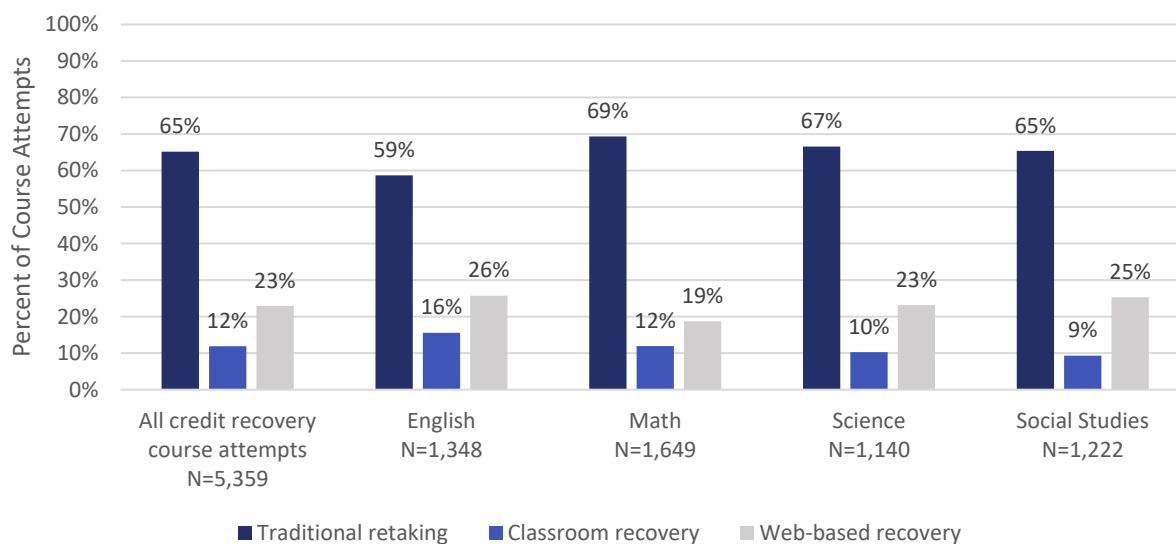
SDP offers three different credit recovery modes: (1) re-taking the course in full in the traditional, classroom format, (2) taking the compressed credit recovery format of the course in a face-to-face classroom format, or (3) taking the compressed recovery format of a course through the web-based recovery platform. For this study, we examined the percent of course attempts by mode of recovery and whether certain subjects were more likely to be taken in a modified vs traditional format.

Credit recovery courses mostly occurred in the traditional format.

Figure 8 below shows which modes students used to attempt to re-gain credits in 2018–19, overall and by subject area. Importantly, these patterns reflect a mix of student preference and format availability.



Figure 8. Percent of credit recovery course attempts in 2018–19 by mode of delivery, overall and by subject area, School District of Philadelphia, N=5,359 course attempts among 3,197 students



Note: Author calculations using administrative data for School District of Philadelphia traditional high school students who first enrolled between 2013–14 and 2017–18, who remained enrolled in SDP in 2018–19, who did not end a school year out of SDP during the study period, and who were enrolled in at least one recovery course (N=3,197). “Traditional high schools” are those that held courses exclusively during the day and fit into one of the following SDP categories: Neighborhood, Citywide, or Special Admission.

Notable findings include:

- Credit recovery courses mostly occurred in traditional format; nearly two in three (65%) credit recovery attempts were made via re-enrolling in traditional courses, followed by web recovery (23%), and classroom recovery (12%).
- There were no significant differences in mode of recovery across course subject areas.

How many enrolled students completed and passed credit recovery courses?

Credit recovery can be effective in helping students quickly re-gain lost credits (Bentley, 2019; Rickles et al., 2017; Eddy & Ballenger, 2016; Stevens & Frazelle, 2016; Andrie, 2012; Gordon, 2007; Watson, 2007). Published rates of recovery (among those who enrolled) in other school districts range from 57% to 94%.¹⁷ This section explores how many students completed their credit recovery courses in 2018-19 and how many students passed the course and re-gained their credit. We also examine completion and pass rates by course subject and mode of credit recovery.

¹⁷ Gordon (2007) found that in a large urban district, 94% of students who enrolled in an online credit recovery course successfully regain the credit. Eddy and Ballenger (2016) found that students who participated in Edgenuity adopted in a Texas school district had a 67% success rate to re-gain the lost credits. Rickles et al. (2017) found that the majority of students in Grade 9 in Chicago Public Schools who failed Algebra I in both the online course (66%) and traditional in-person course (76%) successfully recovered credits. Bentley (2019) reported that 77.8% of students who enrolled in summer online credit recovery passed their courses between 2015 and 2018. In the Montana Digital Academy online credit recovery courses, passing rates were lowest in math (49%) and English language arts (52%), compared to an overall passing rate of 57% (Stevens & Frazelle, 2016).

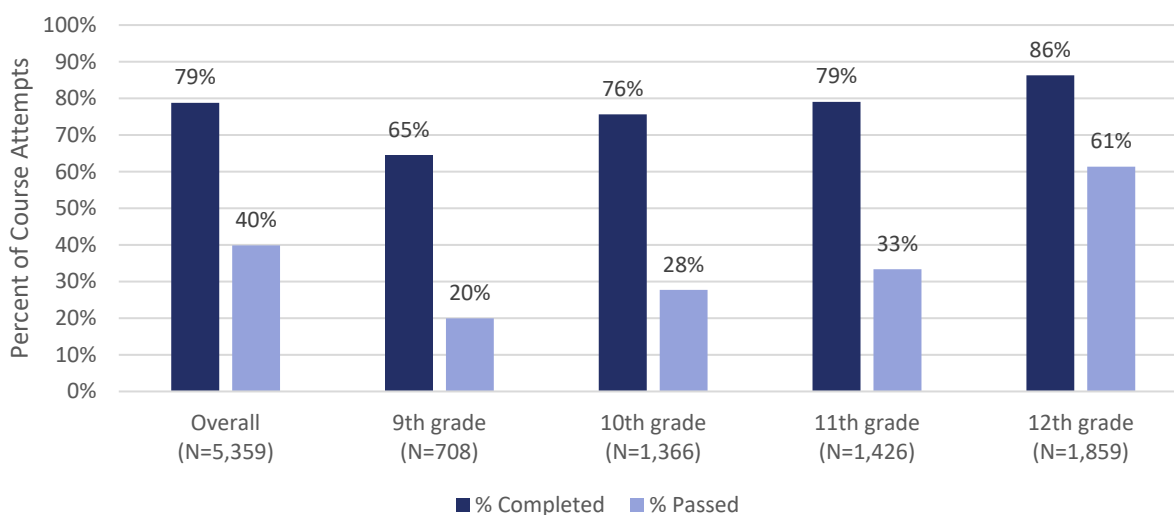


Importantly, these analyses are correlational and do not address the question of which mode is most effective.

Students completed nearly 80% of the courses they enrolled in for recovery but passed only 40% of courses attempted.

In Figure 9 below, we examine the completion and pass rates among courses attempted. We examine overall rates and rates by grade level.

Figure 9. Percent of course attempts that were completed and passed in 2018–19, by grade level, School District of Philadelphia, N=5,359 course attempts among 3,197 students



Note: Author calculations using administrative data for School District of Philadelphia traditional high school students who first enrolled between 2013–14 and 2017–18, who remained enrolled in SDP in 2018–19, who did not end a school year out of SDP during the study period, and who were enrolled in at least one recovery course (N=3,197). The students in Grade 9 in this analysis are repeating the grade due to previous course failures. “Traditional high schools” are those that held courses exclusively during the day and fit into one of the following SDP categories: Neighborhood, Citywide, or Special Admission.

Notably:

- Many course attempts were completed (79%), but the pass rate was low at 40%.
- The pass rate was much higher for seniors (61%) relative to other grades (20%–33%) and lowest for freshmen (20%).

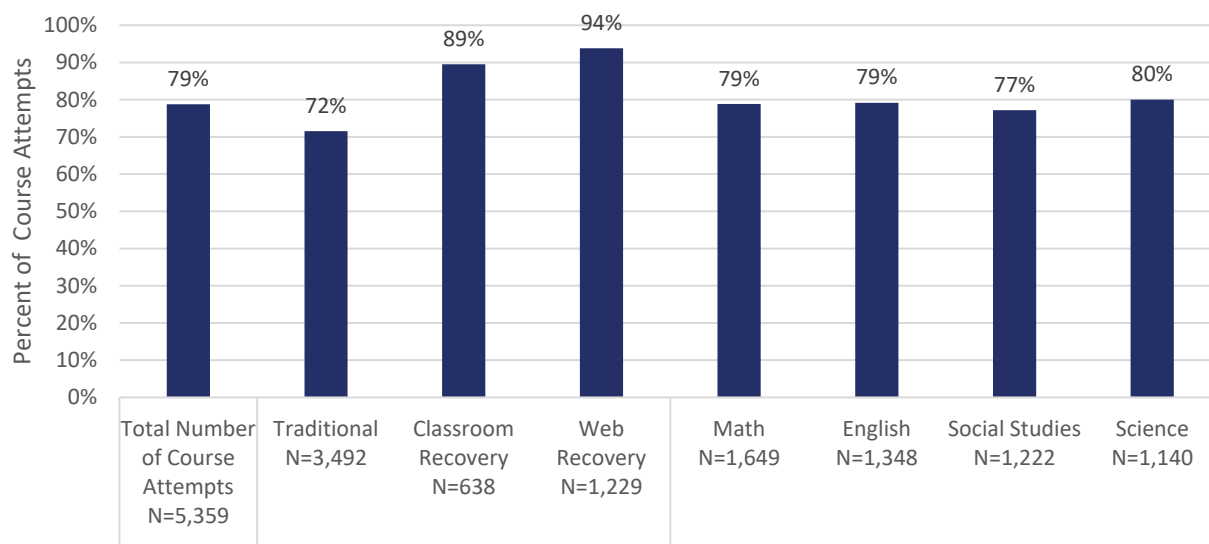
Did course completion and pass rates differ by course format or subject area?

Course completion rates were lowest—but pass rates highest—in credit recovery courses taken in a traditional format.

Figure 10 shows the percent of students who completed credit recovery courses among those who enrolled by mode of delivery and subject area.



Figure 10. Completion rates in attempted credit recovery courses in 2018–19, by mode of recovery and subject area, School District of Philadelphia, N=5,359 course attempts among 3,197 students



Note: Author calculations using administrative data for School District of Philadelphia traditional high school students who first enrolled between 2013–14 and 2017–18, who remained enrolled in SDP in 2018–19, who did not end a school year out of SDP during the study period, and who were enrolled in at least one recovery course (N=3,197). “Traditional high schools” are those that held courses exclusively during the day and fit into one of the following SDP categories: Neighborhood, Citywide, or Special Admission.

Notably:

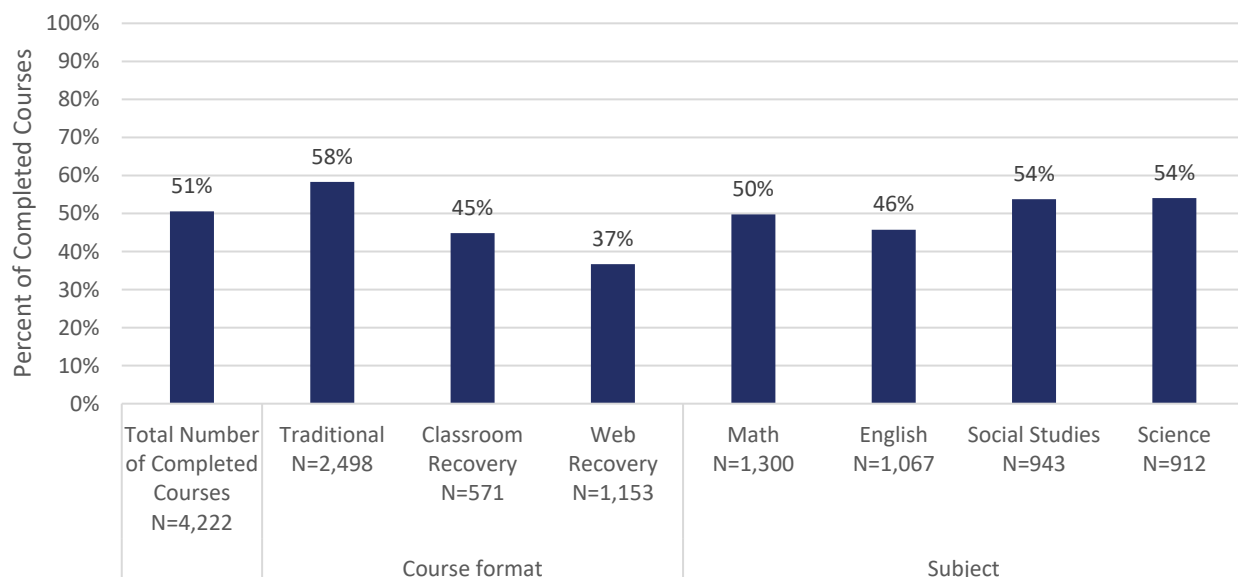
- Recovery course completion rates were high; A large majority of recovery format courses enrolled in were completed, whether through an in-person (89%) or web-based format (94%). Completion rates were lower among students who enrolled in traditional course format to recover their credits (72%).
- There were no significant differences in completion rates across subject areas.

Pass rates were low, even among those who completed credit recovery courses.

Next, we present pass rates for students who completed credit recovery courses. Figure 11 shows the percent of students who passed credit recovery courses among those who completed the course, overall and by mode of delivery and subject area.



Figure 11. Pass rates in completed credit recovery courses in 2018–19, by mode of delivery and subject area, School District of Philadelphia



Note: Author calculations using administrative data for School District of Philadelphia traditional high school students who first enrolled between 2013–14 and 2017–18, who remained enrolled in SDP in 2018–19, who did not end a school year out of SDP during the study period, and who were enrolled and completed in at least one recovery course (N=2,618). “Traditional high schools” are those that held courses exclusively during the day and fit into one of the following SDP categories: Neighborhood, Citywide, or Special Admission.

Notably:

- Among those who completed courses, the pass rate was only 51%.
- Pass rates among completed course attempts were lowest in web-based recovery formats (37%) compared to traditional course formats (58%) and in-person recovery formats.
- There were no major differences in pass rates by subject area among completed course attempts, with about half of all completers passing courses.

Pass rates varied widely by school.

Pass rates among recovery courses varied by school. In Figure 12, we show high schools grouped by their recovery course pass rates. Two schools were excluded from this analysis because they did not have any students enrolled in credit recovery.

Notable results:

- Only five schools had very low pass rates of less than 25%: Arts Academy @ Rush, C.A.P.A., Hill-Freedman, King, and Saul High School.
- In five schools, students passed 75% or more of their enrolled credit recovery courses: Constitution, GAMP, Motivation, Phila Military, and Workshop School.

A list of school-specific pass rates can be found in Appendix C.



Figure 12. Groups of schools based on the pass rates of credit recovery course attempts in 2018–19, School District of Philadelphia, N=50 schools

Credit recovery pass rate groupings	Group 1: Less than 25% passed	Group 2: 25% to less than 50% passed	Group 3: 50% to less than 75% passed	Group 4: 75% or more passed
Schools (in alphabetical order)	Arts Academy @ Rush C.A.P.A. Hill-Freedman King H.S. Saul H.S.	Academy At Palumbo Bartram H.S. Building 21 Edison H.S. F.L.C. Fels H.S. Frankford H.S. Franklin H.S. Girls H.S. Kensington C.A.P.A. Kensington H.S. Lincoln H.S. Mastbaum H.S. Northeast H.S. Overbrook H.S. Parkway West Randolph H.S. Roxborough H.S. Sayre H.S. South Phila Hs Vaux High Washington H.S. West Phila H.S.	Bodine H.S. Carver Central H.S. Dobbins H.S. Furness H.S. H.S. Of Future Kensington Health Lankenau H.S. Parkway C.C. Parkway N.W. Penn Treaty Robeson H.S. S.L.A. @ Beeber Strawberry Mansion Swenson H.S. The Linc The U School	Constitution H.S. G.A.M.P. Motivation H.S. Phila Military Workshop School
Number (%) of schools	5 (10%)	23 (46%)	17 (34%)	5 (10%)
Weighted group average pass rate ¹⁸	18%	36%	56%	90%

Note: Author calculations using administrative data for School District of Philadelphia traditional high school students who first enrolled between 2013–14 and 2017–18, who remained enrolled in SDP in 2018–19, who did not end a school year out of SDP during the study period, and who were enrolled and completed in at least one recovery course (N=2,618). “Traditional high schools” are those that held courses exclusively during the day and fit into one of the following SDP categories: Neighborhood, Citywide, or Special Admission.

How many students who recovered credits successfully completed another course in the subject area in 2019–20?

As shown in Figure 1, 599 students recovered credits in 2018–19 who were still enrolled in SDP high schools in 2019–20. For these students, we assessed subsequent course enrollment and performance.

¹⁸ The weighted group average pass rate is computed by averaging the pass rates at each individual school, weighted by the number of enrolled students in the sample that attended that school.



The pass rate was high (88%) for completed subsequent courses in 2019–20.

In Table 3, we present subsequent course attempts, completions, and pass rates among students who passed credit recovery courses in 2018–19.

Table 3. Subsequent course attempts, completions, and pass rates in 2019–20 among students who passed credit recovery courses in 2018-19, School District of Philadelphia

	Number of courses taken	Number of courses completed	Percent of courses completed	Number of courses passed	Percent of completed courses passed
The overall number of courses taken in 2019–20 by students who had recovered credits in the same subject in 2018–19	754	736	98%	645	88%
By subject					
English	169	165	98%	153	93%
Math	274	269	98%	224	83%
Science	121	118	98%	105	89%
Social Studies	190	187	98%	167	89%

Note: Author calculations using administrative data for School District of Philadelphia traditional high school students who first enrolled between 2013–14 and 2017–18, who remained enrolled in SDP in 2019–20, who did not end a school year out of SDP during the study period, and who passed at least one recovery course in 2018–19 (N=599). “Traditional high schools” are those that held courses exclusively during the day and fit into one of the following SDP categories: Neighborhood, Citywide, or Special Admission high school.

Findings:

- In total, there were 754 credit recovery course attempts among the 518 students who enrolled in the same subject or subjects of their recovered course. These students successfully recovered at least one course the prior year, most (70%) of whom recovered the credit by re-taking the course in a traditional format (results not shown in table).
- Among courses taken in the same subject that the student re-gained a credit in during 2018–19, nearly all (98%) were completed in the 2019–20 school year. This was consistent across subjects.
- Most courses (88%) were passed in 2019–20, among courses taken and completed in the same subject that the student re-gained a credit in during 2018–19.
- A slightly smaller proportion of Math courses (83%) were passed in the 2019–20 year, compared to all other subjects (89%–93%).

How did credit recovery utilization vary by student characteristics?

As with nearly all educational processes, our research would be incomplete without shining a light on disparities in credit recovery eligibility, measured both in terms of student identity characteristics as well as across schools.



Moderate gaps in eligibility and pass rates were evident, but not enrollment rates, suggesting inequality in supports for academic success rather than access to credit recovery options.

First, we examine disparities in eligibility, enrollment, and course pass rates by student subgroups. The results are presented in Table 4.

Table 4. Credit recovery utilization by student subgroups, School District of Philadelphia, 2018–19

	Number of students enrolled in SDP traditional high schools in 2017–18 (N=32,199)	% Eligible for at least one credit recovery course (N=32,199)	% Enrolled in at least one credit recovery course (N=5,656)	% Passed all credit recovery courses (N=3,197)
Gender				
Male	15,822	33%	57%	36%
Female	16,377	21%	56%	39%
Race/Ethnicity				
Black	17,025	31%	56%	36%
Hispanic	6,117	31%	56%	36%
White	4,122	18%	58%	37%
Asian	3,636	9%	59%	59%
Another race or multi-racial	1,299	21%	53%	37%
Family low-income status in 2018–19 (Free from Tape)*				
Participated in social service programs	16,526	35%	57%	41%
Did not participate in social service programs	15,673	18%	56%	29%
Special Education services				
Received services	4,040	39%	56%	27%
Did not receive services	28,159	25%	57%	39%
English learner services received in 2018–19				
Received services	3,543	25%	56%	46%
Did not receive services	28,656	27%	57%	36%

Note: Author calculations using administrative data for School District of Philadelphia traditional high school students who first enrolled between 2013–14 and 2017–18, who remained enrolled in SDP in 2018–19, who did not end a school year out of SDP during the study period. “Traditional high schools” are those that held courses exclusively during the day and fit into one of the following SDP categories: Neighborhood, Citywide, or Special Admission. *Students 18 years or older are no longer eligible for income-based services, so are counted here as “did not receive social service programs” even if they lived in low-income families.

Notably:

- There are large differences in eligibility across student subgroups, but not for enrollment rates. Specifically:



- The eligibility rate was higher for males (33%) than females (21%), which aligns with other studies that examine gender gaps (Bently 2019; Stevens & Fazelle 2016).
- Rates differed significantly across racial/ethnic groups with Asian students much less likely to be eligible for credit recovery (9%) than their peers, and gaps between white (18%) students and Black (31%) and Hispanic (31%) students also significant.
- We also saw a 17-percentage-point difference in eligibility between those who were identified by the district as low income (35%) and those who were not (18%).
- While we did not see differential eligibility rates for students who received EL services and those that did not, we do see moderate a moderate 14-percentage point difference between students receiving special education services (39%) and those that did not (25%).
- **Pass rates** among completed courses were generally low, but varied significantly across student subgroups from 27%–46%, with Asian students the only subgroup with a pass rate of over half (59%).
 - Racial/ethnic differences in pass rates were evidence between Asian (59%) and their peers (36%–37%).
 - Students receiving EL services (46%) and students identified as low-income (41%) had higher pass rates compared to their peers (36% and 29%, respectively).
 - A 12-percentage-point gap in pass rates was evident among students receiving special education services (27%) compared to their peers (39%).
 - Pass rates did not vary by gender.

We also examined these rates by race and gender (e.g., Black males, Hispanic females, etc.) in Appendix E.

How did credit recovery utilization vary by school characteristics?

Eligibility and enrollment rates were highest but pass rate lowest among students attending neighborhood schools.

Our final analysis examines eligibility, enrollment, and pass rates across groups defined by school characteristics, both school type, and size (Table 5).

**Table 5. Credit recovery utilization by school subgroups, School District of Philadelphia, 2018–19**

	Number of students enrolled in SDP traditional high schools in 2017–18 (N=32,199)	% Eligible for at least one credit recovery course (N=32,199)	% Enrolled in at least one credit recovery course (N=5,656)	% Passed all credit recovery courses (N=3,197)
School Type				
Neighborhood	15,627	37%	62%	35%
Citywide	4,778	32%	46%	44%
Special Admission	11,794	10%	44%	44%
School Size				
Small (1–600 students)	11,491	32%	51%	38%
Medium (601–900 students)	7,218	21%	55%	40%
Large (901+ students)	13,490	25%	63%	35%

Note: Author calculations using administrative data for School District of Philadelphia traditional high school students who first enrolled between 2013–14 and 2017–18, who remained enrolled in SDP in 2018–19, who did not end a school year out of SDP during the study period. Sample size as shown in each column. “Traditional high schools” are those that held courses exclusively during the day and fit into one of the following SDP categories: Neighborhood, Citywide, or Special Admission high school.

Notably:

- Access gaps are largest in Special Admission schools, which, compared to the neighborhood and citywide schools have the lowest eligibility rate (10%) but also the lowest enrollment rate (44%).
- Eligibility (37%) and enrollment (62%) rates were highest, but pass rate lowest (35%), among students attending neighborhood schools, compared to students in citywide and special admit schools.
- Nearly one-third of students in small schools (those with 600 or fewer students) were eligible for credit recovery at the end of the 2017–18 year.
- A higher percentage (63%) of eligible students at large schools (those with more than 900 students) enrolled in a course to attempt credit recovery. For comparison, 55% of eligible students at medium-sized schools and 51% of students at small schools were enrolled in a course to recover lost credit.



Implications for policy and practice

Our study draws attention to a significant need in traditional district high schools for credit recovery, needs that are greater in some schools than others. Many district high school students—over a quarter—ended the 2017–18 school year with at least one core course failure, and more than half of these students had course failures in more than one course. In any given year, credit recovery needs are not uniform across the district. Across schools, the range of students with course failure records is wide, between none (Masterman) to over half (Overbrook).

The significant need for credit recovery is not being met, at least by school-year credit recovery options. Only slightly over half of the eligible district high school students attempted to recover at least one credit during the 2018–19 school year. While course completion rates were high (over 80%), pass rates were low (40%), even among those who completed the course (50%).

More support is needed for students to be successful in core courses, both in traditional and credit recovery formats. The high percentage of students in traditional schools that fail one or more core courses coupled with low pass rates suggest prevention would be more effective than remediation in its current form.

This study provides descriptive data on enrollment and pass rates across different modes of recovery, but more research is needed to understand which modes are most effective for which students. Completion rates were lower (72%) but pass rates were higher (58%) among students who enrolled in traditional course format to recover their credits. Pass rates were lowest for students who used online recovery, e.g., Edgenuity (37%). These patterns provide important information about credit recovery utilization, but a different study design is needed to understand the academic demand of different credit recovery options, what the short- and long-term impacts are across different approaches, and what supports are helpful for students to be successful.¹⁹ Also, the subsequent course performance of students that recover credits weakens the claim that credit recovery credits are not rigorous courses, but is certainly not definitive evidence of course rigor in and of itself.

To guide a path forward, the district should consider systematically examining and scaling what is currently working in the district and providing more resources for evidence-based practices—such as academic support classes and tutoring—where many students are struggling. In combination with more research on the effectiveness of credit recovery approaches, we encourage the district to use this report to examine the bright spots in credit recovery utilization. Models of strong access to credit recovery in settings with high need, for example, might be investigated at Southern High and Strawberry Mansion, where over half of the students were eligible for credit recovery and credit recovery course enrollment was over 70%. Efforts for improving pass rates might be modeled by Robeson, Workshop School, and Motivation High School, where between 75%–100% of students who enrolled in credit recovery successfully recovered credits.

¹⁹ One example of such a study design can be found in an IES-funded study in Chicago Public schools in the early 2010s, a targeted comparison of on-line (Adventa) and face-to-face summer credit recovery for freshmen who failed Algebra 1 in 17 CPS high schools (Heppen et al. 2016). About 1,200 students who had failed the second semester of Algebra 1 were randomly assigned to online and face-to-face formats. Most successfully recovered credit in both types of courses, but students in the online course were less likely to pass than students in the face-to-face course (66% vs. 76%).



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Appendix A. Student- and school-level variables

Key variables for this analysis were defined in Box 2 of this report. Further detail about the variables used to classify students and schools are provided below.

- **Race/Ethnicity:** Categorical variable for if the student identified as Black, Hispanic, White, Asian, or another race (including: American Indian or Alaskan Native, Native Hawaiian or Pacific Islander, or multiracial)
- **Gender:** Indicator of whether the student identified as male or female.
- **Family low-income status:** Indicator of whether a student’s family received public assistance through Temporary Assistance for Needy Families (TANF), Supplemental Nutrition Assistance Program (SNAP), Medicaid, or other social service programs. While this measure identifies the most economically disadvantaged students, it underestimates the number of students living at or close to poverty compared to the previously available Free and Reduced Price Lunch eligibility measures.
- **Special education status:** Indicator of whether students were receiving special education services other than gifted and talented services.
- **English learner status:** Indicator of whether a student was classified as English learner and receiving linguistic support.
- **High school type:** Based on SDP classifications of high schools, each high school was identified as a Neighborhood school (which primarily draws students from a catchment area based on the elementary school the student attended), a Citywide school (which draws students from all over Philadelphia and has a lottery-based admission process), or a Special Admission school (which are “magnet” schools with specific admissions requirements).
- **High school size:** Based on the total number of students enrolled in the school in the year being studied (2017–18 or 2018–19 for this study), the research team developed an indicator for small (600 or fewer students), medium (601–900 students), or large (901 or more students) schools.



Appendix B. School-specific credit recovery eligibility rates, 2017–18 and 2018–19

This table presents school-specific credit recovery eligibility rates at the end of the 2017–18 and the beginning of 2018–19 school year. Because nearly 3,000 students exited SDP in the summer of 2018, either because they graduated, dropped out of school, or transferred to another LEA, we present rates for both time points. Importantly, these are not definitive rates of credit recovery eligibility because not all students at each school are included in our data. However, we present the numbers below to provide some indication of the level of need for credit recovery options across the district. Within bins defined by rates of less than 10%, 10% to less than 25%, 25% to less than 50%, and 50% or more, schools are ordered alphabetically.

School Rate of Eligibility	School	% Students <u>eligible</u> for credit recovery in traditional SDP high schools in 2017–18 (N=32,199)	% Students <u>eligible</u> for credit recovery, of those who remained enrolled in traditional SDP high schools in 2018–19 (N=22,716)
Less than 10%	Academy at Palumbo	7%	6%
	Arts Academy @ Rush	2%	1%
	C.A.P.A.	6%	5%
	Central H.S.	5%	4%
	G.A.M.P.	8%	6%
	Masterman H.S.	0%	0%
	Parkway C.C.	9%	5%
	S.L.A.	2%	2%
	Swenson H.S.	9%	7%
10% to less than 25%	Bodine H.S.	10%	7%
	Carver	14%	13%
	Constitution H.S.	12%	11%
	F.L.C.	14%	11%
	Furness H.S.	23%	23%
	Girls H.S.	10%	11%
	Hill-Freedman	13%	11%
	Lankenau H.S.	15%	15%
	Motivation H.S.	23%	22%
	Parkway N.W.	21%	19%
	Phila Military	14%	15%
	S.L.A. @ Beeber	13%	12%
	Saul H.S.	19%	19%
	Vaux High	20%	23%



School Rate of Eligibility	School	% Students eligible for credit recovery in traditional SDP high schools in 2017–18 (N=32,199)	% Students eligible for credit recovery, of those who remained enrolled in traditional SDP high schools in 2018–19 (N=22,716)
25% to less than 50%	Bartram H.S.	37%	39%
	Dobbins H.S.	38%	40%
	Edison H.S.	40%	41%
	Fels H.S.	35%	33%
	Frankford H.S.	38%	40%
	H.S. Of Future	32%	29%
	Kensington C.A.P.A.	32%	26%
	Kensington H.S.	42%	43%
	Kensington Health	35%	31%
	Lincoln H.S.	40%	38%
	Mastbaum H.S.	43%	43%
	Northeast H.S.	31%	30%
	Penn Treaty	33%	35%
	Randolph H.S.	46%	51%
	Robeson H.S.	26%	28%
	Roxborough H.S.	27%	27%
	Sayre H.S.	46%	43%
	The Linc	36%	41%
	The U School	42%	40%
	Washington H.S.	32%	32%
West Phila H.S.	44%	39%	
Workshop School	26%	17%	
50% or more	Building 21	56%	49%
	Franklin H.S.	51%	49%
	King H.S.	52%	47%
	Overbrook H.S.	56%	57%
	Parkway West	56%	55%
	South Phila Hs	52%	51%
	Strawberry Mansion	57%	56%

Note: Author calculations using administrative data for School District of Philadelphia traditional high school students who first enrolled between 2013–14 and 2017–18 and who did not end a school year out of SDP during the study period (N=32,199). School data in 2018–19 are further restricted to those students who remained enrolled in traditional high schools in 2018–19 (N=22,716). “Traditional high schools” are those that held courses exclusively during the day and fit into one of the following SDP categories: Neighborhood, Citywide, or Special Admission high school.



Appendix C. School-specific enrollment rates among those eligible for credit recovery in 2018–19

This table presents school-specific credit recovery enrollment rates for students eligible for credit recovery in 2018–19. The rates presented reflect the number of students who enrolled in at least one credit recovery course. Importantly, these are not definitive rates, because these data do not include students who transferred to the school in 2018–19 due to data restrictions. However, we present these rates to show variation in enrollment in credit recovery across the district. Within rate bands of less than 25%, 25% to less than 50%, and greater than 50%, schools are ordered alphabetically.

School rate of enrollment in credit recovery	School	% of Students who enrolled in credit recovery in 2018–19, among those eligible (N=5,656)
Less than 25%	Arts Academy @ Rush	20%
	Bodine H.S.	18%
	Mastbaum H.S.	20%
	Motivation H.S.	22%
	Phila Military	13%
	Robeson H.S.	14%
	S.L.A.	0%
	S.L.A. @ Beeber	19%
	Vaux High	8%
25% to less than 50%	Building 21	42%
	C.A.P.A.	48%
	Carver	33%
	Central H.S.	29%
	Constitution H.S.	39%
	G.A.M.P.	42%
	Kensington Health	33%
	Parkway N.W.	49%
	Parkway West	35%
	Saul H.S.	28%
	The U School	30%
	Workshop School	30%



School rate of enrollment in credit recovery	School	% of Students who enrolled in credit recovery in 2018–19, among those eligible (N=5,656)
50% or more	Academy at Palumbo	74%
	Bartram H.S.	56%
	Dobbins H.S.	88%
	Edison H.S.	57%
	F.L.C.	72%
	Fels H.S.	70%
	Frankford H.S.	71%
	Franklin H.S.	73%
	Furness H.S.	59%
	Girls H.S.	71%
	H.S. Of Future	62%
	Hill-Freedman	72%
	Kensington C.A.P.A.	73%
	Kensington H.S.	56%
	King H.S.	50%
	Lankenau H.S.	62%
	Lincoln H.S.	68%
	Northeast H.S.	58%
	Overbrook H.S.	57%
	Parkway C.C.	53%
	Penn Treaty	61%
	Randolph H.S.	57%
	Roxborough H.S.	63%
	Sayre H.S.	72%
	South Phila Hs	73%
Strawberry Mansion	73%	
Swenson H.S.	69%	
The Linc	60%	
Washington H.S.	60%	
West Phila H.S.	78%	
Not applicable (no eligible students)	Masterman H.S.	NA

Note: Author calculations using administrative data for School District of Philadelphia traditional high school students who first enrolled between 2013–14 and 2018–19, who did not end a school year out of SDP during the study period, and who were eligible for credit recovery (N=5,656). “Traditional high schools” are those that held courses exclusively during the day and fit into one of the following SDP categories: Neighborhood, Citywide, or Special Admission.



Appendix D. School-specific pass rates among students enrolled in credit recovery in 2018–19

This table presents school-specific credit recovery course pass rates, among course enrollments and completions. There were 5,359 course attempts overall in the district among 3,197 students, with some students attempting multiple courses. Importantly, some course attempts are not reflected here. Students who transferred into schools in 2018–19 are not included in this analysis, due to data restrictions. We present these data, not as definitive pass rates, but to demonstrate the variation in pass rates across the district. Within bands of less than 25%, 25% to less than 50%, 50% to less than 75%, and over 75%, schools are ordered alphabetically.

School Credit Recovery Course Pass Rate (among those enrolled)	School	% of passed credit recovery courses, among those enrolled (N=5,359)	% of passed credit recovery courses, among those that were completed (N=4,222)
Less than 25%	Arts Academy @ Rush	0%	0%
	C.A.P.A.	14%	14%
	Hill-Freedman	9%	9%
	King H.S.	20%	29%
	Saul H.S.	19%	27%
25% to less than 50%	Academy At Palumbo	49%	56%
	Bartram H.S.	43%	53%
	Building 21	31%	38%
	Edison H.S.	32%	41%
	F.L.C.	37%	46%
	Fels H.S.	30%	33%
	Frankford H.S.	33%	46%
	Franklin H.S.	39%	62%
	Girls H.S.	29%	35%
	Kensington C.A.P.A.	30%	46%
	Kensington H.S.	41%	55%
	Lincoln H.S.	30%	44%
	Mastbaum H.S.	46%	55%
	Northeast H.S.	45%	49%
	Overbrook H.S.	30%	40%
	Parkway West	46%	56%
	Randolph H.S.	30%	40%
	Roxborough H.S.	41%	55%
	Sayre H.S.	32%	57%
South Phila Hs	46%	60%	
Vaux High	33%	100%	



School Credit Recovery Course Pass Rate (among those enrolled)	School	% of passed credit recovery courses, among those enrolled (N=5,359)	% of passed credit recovery courses, among those that were completed (N=4,222)
	Washington H.S.	40%	48%
	West Phila H.S.	26%	41%
50% to less than 75%	Bodine H.S.	60%	75%
	Carver	74%	88%
	Central H.S.	55%	55%
	Dobbins H.S.	51%	52%
	Furness H.S.	60%	71%
	H.S. Of Future	50%	61%
	Kensington Health	59%	70%
	Lankenau H.S.	74%	74%
	Parkway C.C.	57%	73%
	Parkway N.W.	68%	76%
	Penn Treaty	54%	79%
	Robeson H.S.	64%	70%
	S.L.A. @ Beeber	67%	75%
	Strawberry Mansion	57%	72%
	Swenson H.S.	57%	57%
	The Linc	50%	71%
The U School	51%	59%	
75% to 100%	Constitution H.S.	100%	100%
	G.A.M.P.	100%	100%
	Motivation H.S.	88%	94%
	Phila Military	75%	75%
	Workshop School	80%	89%
Not applicable (no enrolled students)	Masterman H.S.	NA	NA
	S.L.A.	NA	NA

Note: Author calculations using administrative data for School District of Philadelphia traditional high school students who first enrolled between 2013–14 and 2017–18, who remained enrolled in SDP in 2018–19, who did not end a school year out of SDP during the study period, and who were enrolled (N=3,197) and completed in at least one recovery course (N=2,618). “Traditional high schools” are those that held courses exclusively during the day and fit into one of the following SDP categories: Neighborhood, Citywide, or Special Admission.



Appendix E. Student eligibility, enrollment, and passing rates, by race and gender

This table presents the credit recovery eligibility, enrollment, and passing rates of students by race and gender.

	Number of students enrolled in SDP traditional high schools in 2017–18 (N=32,199)	% Eligible for at least one credit recovery course (N=32,199)	% Enrolled in at least one credit recovery course (N=5,656)	% Passed all credit recovery courses (N=3,197)
Gender and Race/Ethnicity				
Males				
Black	8,135	39%	57%	36%
Hispanic	3,129	38%	56%	35%
White	2,037	22%	61%	35%
Asian	1,867	11%	60%	59%
Another race or multi-racial	654	23%	52%	28%
Females				
Black	8,890	25%	56%	37%
Hispanic	2,988	24%	57%	38%
White	2,085	14%	53%	41%
Asian	1,769	6%	57%	58%
Another race or multi-racial	645	19%	55%	46%

Note: Author calculations using administrative data for School District of Philadelphia traditional high school students who first enrolled between 2013–14 and 2018–19, who did not end a school year out of SDP during the study period.