Pearson

Connections Academy

Efficacy Report Summary

Connections Academy is a full-time, tuition-free, virtual public school program that served more than 70,000 K–12 students in 27 states in the 2017–2018 school year. Pearson undertook two research studies to answer three questions about the efficacy of Connections Academy.

Study 1 — Phase 1:

Why choose Connections Academy virtual school?

We analyzed the characteristics of students enrolled in Connections Academy virtual schools during the 2015–2016 academic year, to gain a clearer understanding of the types of students attending Connections Academy schools.

What we found

We found that Connections Academy schools serve highly mobile students with complex needs known to impact academic performance. These needs include, among others, health concerns, bullying and safety, looking to be challenged, trying to catch up, and flexible scheduling. These characteristics create a unique student population that differs from traditional brick-and-mortar schools.

How we did the research

We looked at students' achievement scores, reasons for choosing to attend a Connections Academy virtual school, enrollment/attendance, demographic and family background information to build up student profiles.

Study 1 — Phase 2:

How do Connections Academy schools perform?

To analyze the relation between enrollment in Connections Academy virtual schools and student achievement, we partnered with a research consultancy firm, Gatti Evaluation, to compare the state assessment performance of 3rd–8th grade students in Connections Academy schools with similar virtual and brick-and-mortar schools in the 19 US states with participating Connections Academy schools.

What we found

We found evidence that Connections Academy students:

— can receive the same quality of education as that offered at their local public school, while simultaneously taking advantage of the benefits offered to them by virtual schools

— may perform better than students in other virtual schools

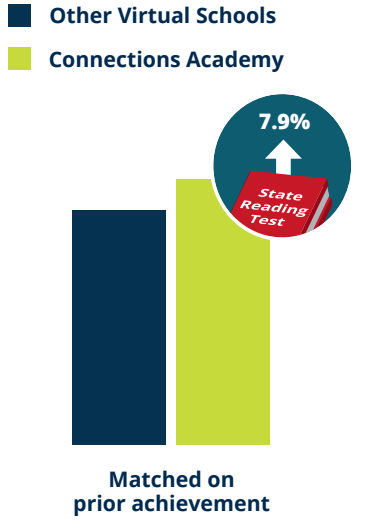
In the context of the study of representative Connections Academy schools for students enrolled during the 2013–2014 to 2015–2016 academic years, Pearson is able to make the following statements about the efficacy of Connections Academy schools:

— There was no statistical difference in percentage scoring proficient in math and reading between student cohorts in Connections Academy schools and cohorts in brick-and-mortar schools that were matched on prior achievement, and after adjusting for district-mean student mobility and school-mean student SES[1] and other demographic factors.

— Student cohorts in Connections Academy schools statistically outperformed (by 7.9 percentage points) cohorts in other virtual schools (matched on prior achievement) in terms of the percentage scoring proficient in reading on state assessments.

— There was no statistical difference in percentage scoring proficient in math between student cohorts in Connections Academy schools and cohorts in other virtual schools that were matched on prior achievement.

Key findings



1 Socioeconomic status

This statement is set out in full in the box titled "Efficacy statements" on page 27 of the Research Report where they have been subject to assurance by PwC, whose report can be found at the end of the Research Report.

How we did the research

The research measured performance using the percentage of students scoring proficient on state math and reading assessments in 2015 and 2016.

The researchers compared the performance of students enrolled in participating Connections Academy virtual schools with that of students enrolled in:
— Non-charter brick-and-mortar schools in the same state and with similar student populations
— Other virtual schools in the same state and with similar student populations

Study 1

Does taking GradPoint credit recovery courses help students make up lost credits?

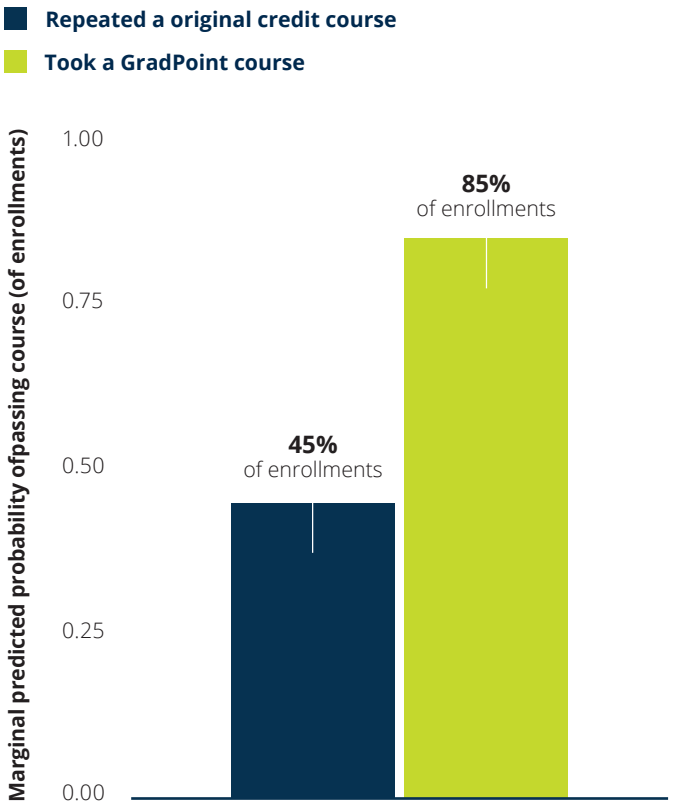
GradPoint is a course offered to Connections Academy students in 9th–12th grade who fail an original credit course. GradPoint allows students to focus only on the skills they have not yet mastered, making it a more efficient credit recovery option than repeating the original credit course.

We analyzed Connections Academy students enrolled in GradPoint credit recovery courses in 2015–2016 to evaluate whether GradPoint helped Connections Academy students to be more effective at making up lost credits when compared with repeating the Connections course offering alone.

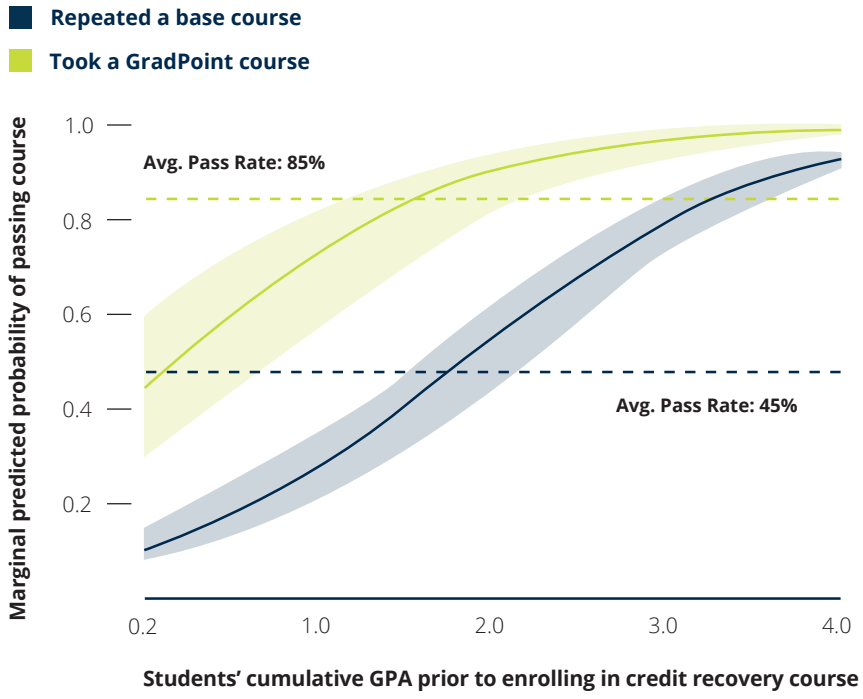
What we found

After adjusting for achievement-related student characteristics and enrollment factors, the average adjusted pass rate for GradPoint enrollments was 85% — significantly higher than the average pass rate of 45% for original credit course completions.

Marginal effect of credit recovery type on course pass rates



Adjusted course pass rates by course type and students' cumulative GPA (ribbons denote 95% prediction intervals)



In the context of the study of Connections Academy schools for students enrolled in GradPoint credit recovery courses during 2015–2016, Pearson is able to make the following statements about the efficacy of the Connections Academy school program:

— Connections Academy students taking GradPoint credit recovery online courses, after failing a course, were almost twice as likely to pass the course than similar students (matched on prior GPA and after adjusting for demographic and enrollment factors) who repeated with a Connections Academy course offering.

— After controlling for prior GPA, subject area, and course level, students who passed GradPoint credit recovery online courses tended to perform as well as students who passed the repeated Connections Academy course offering on math and reading state assessments, as there was no statistically significant difference in performance.

— Connections Academy offers successful intervention solutions for recovering credits to struggling students as evidence by its high success rate of 85% for GradPoint online credit recovery course completion.

This statement is set out in full in the box titled "Efficacy statements" on page 21 of the Research Report where they have been subject to assurance by PwC, whose report can be found at the end of the Research Report.

How we did the research

We looked at course pass rates and proficiency levels on state English and mathematics assessments for two groups of Connections Academy students who had failed a course: one group of students who chose to repeat the original credit course, and one group who chose to enroll in a GradPoint credit recovery online course.

We used propensity score matching to make sure the students in each sample were similar enough to compare on pass rates. We also used a retrospective cohort design to assess whether students that enrolled in and passed GradPoint courses tended to have similar state test performance as students repeating original credit courses.

Explore the full report at Pearson.com/corporate/efficacy-and-research

Pearson's Efficacy Commitment

In 2013, Pearson made a commitment to efficacy: to identify the outcomes that matter most to students and educators, and apply evidence-based approaches to product design, development and implementation support so we could have a greater impact on improving those outcomes. We committed to reporting on the impact of use of products, commencing in 2018 with some of our most frequently used products.

To Pearson, efficacy is more than a commitment to report on the impact of use of our products on outcomes. It is even more than a way to continuously improve our products. Efficacy is a priority for everyone at Pearson. Applying outcomes-focused, evidence-based design to our products, and supporting educators to use them to help more learners learn more, is at the heart of who we are, what we do — and of our vision for the future of learning.