

EFFICACY BRIEF

A Study of Apex Learning and Student Achievement Years 1 and 2

Dorchester School District Two

September 2013

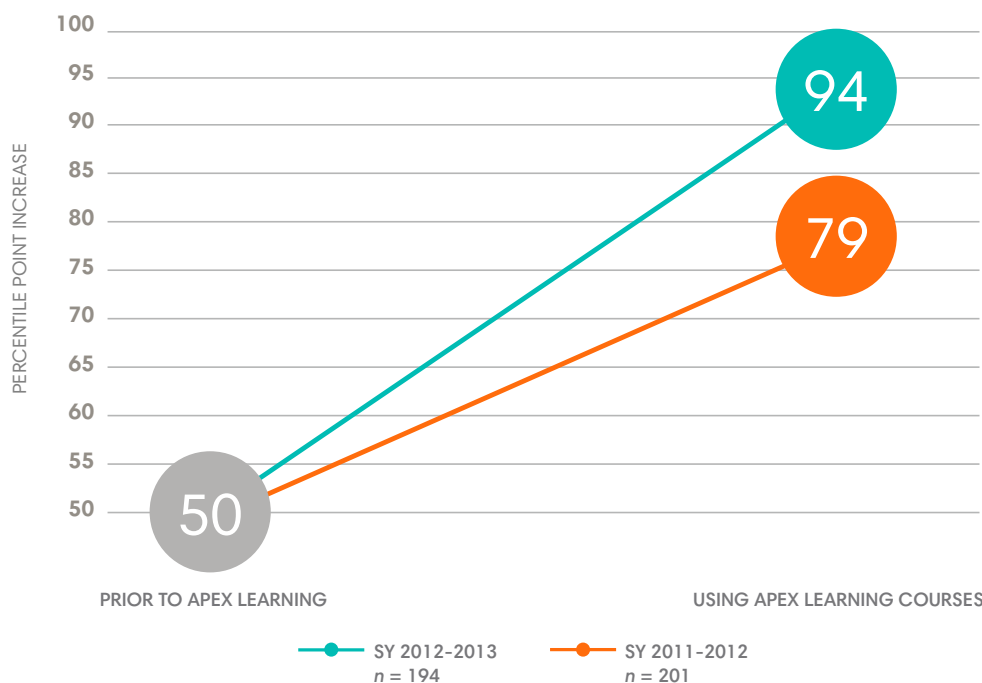


Summary

According to the National Center for Educational Statistics (NCES), one out of four students will not graduate on time (U.S. Department of Education, 2011). America's Promise reports that for African American and Hispanic students, the ratio increases to one out of two (2012).

School districts challenged to increase their graduation rates are turning to Apex Learning digital curriculum to support programs that increase graduation rates and decrease dropout rates. Apex Learning provides standards-based Comprehensive Courses that makes rigorous content accessible to each student and results in increased student outcomes.

A third-party study conducted over two consecutive years in Dorchester School District Two in South Carolina demonstrates the impact that Apex Learning Comprehensive Courses have on student gains. Graph 1 below shows that students recovering credit using Apex Learning courses achieved greater gains on the South Carolina High School Assessment Program (HSAP) during both school years (SY) (Empirical Education, 2012; Empirical Education, 2013).



GRAPH 1:

Achievement Gains of Average Performing Student

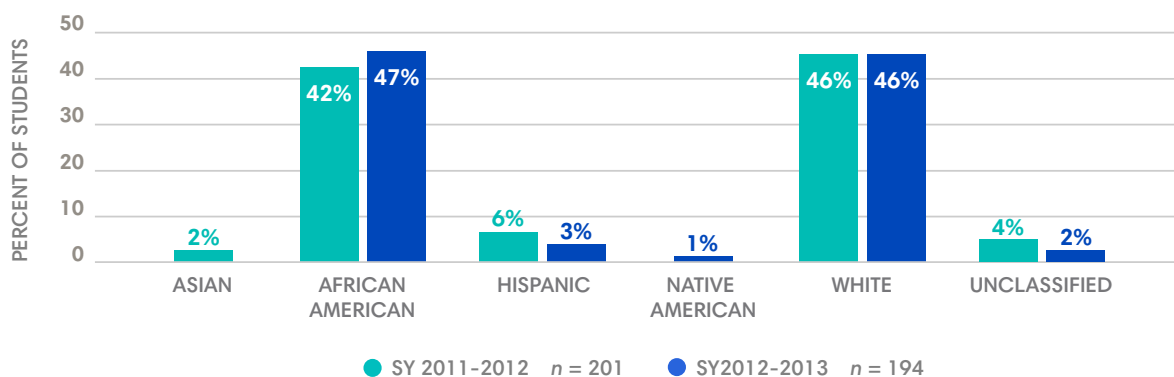
In the 2011–2012 school year sample of students completing Apex Learning courses for credit recovery, the average student achieved a 29 percentile point gain on the HSAP exam, moving from the 50th percentile to the 79th percentile (Empirical Education, 2012). The average student in the 2012–2013 school year sample achieved a 44 percentile point gain on the HSAP exam, moving from the 50th percentile to the 94th percentile (Empirical Education, 2013).

The Challenge: Addressing Deteriorating Graduation Rates

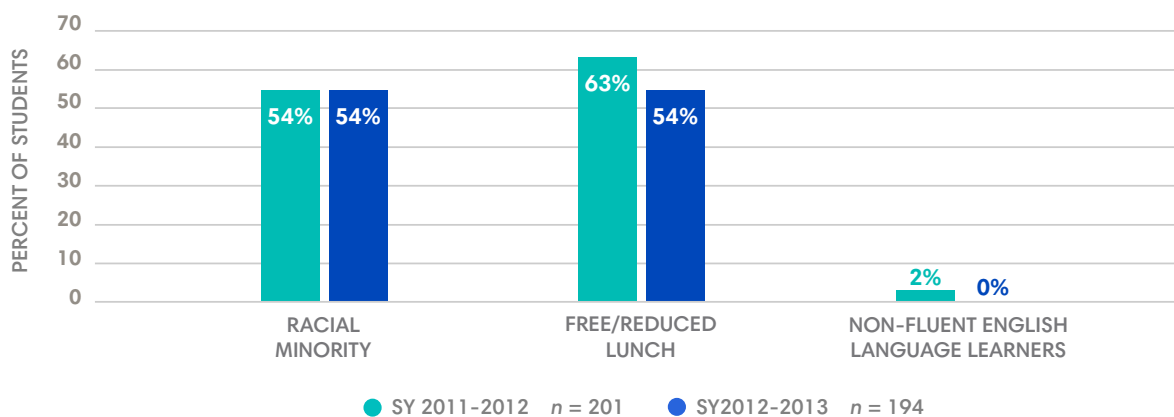
Like many school districts across the nation, Dorchester School District Two faced a deteriorating graduation rate. In 2008, administrators and school leaders began designing a new credit recovery program to give students the opportunity to regain their academic footing and graduate on time.

As administrators identified students they wanted to target for credit recovery, they realized that the population was as diverse as their instructional needs. Graphs 2 and 3 identify the demographic characteristics of Dorchester District Two students completing courses for credit recovery. While "the population of students needing credit recovery overlaps with the population of at-risk students, the two groups are not the same" (Watson, J. & Gemin, B., 2008). Pat Tolliver, guidance director at Dorchester School District Two, has witnessed this firsthand. "The type of students that fall behind and need to recover credits are just as diverse as the reasons they fall behind, and each have a unique set of needs," said Tolliver. "In our program, we have students who struggle academically, others who are high-performing but are bored from lack of challenge, and those who have life circumstances that keep them from being able to come to school regularly."

Characteristics of Dorchester District Two Students Completing Courses for Credit Recovery



GRAPH 2:
Racial and Ethnic Characteristics



GRAPH 3:
Demographic Characteristics

At-Risk Learners

The student who struggles academically is perhaps the most common type of student who needs to recover credit. At Dorchester School District Two, students who fail one class are able to complete the corresponding Apex Learning course independently outside of school. Students failing more than one class are given additional guidance and support by attending an in-school credit recovery program where they work online in a computer lab supervised by a teacher. Once the students recover credit for the failed classes, they return to a regular school schedule unless they choose to continue taking online courses to accelerate their learning.

Researchers who study at-risk learners and online education suggest that external factors such as "course design and learning activities can and will influence motivation within the context of learning" (Archambault, et. al., 2010). Apex Learning courses are intentionally designed to support content understanding while motivating students to excel. The curriculum's innovative design creates an individualized learning experience by providing multiple layers of scaffolding to increase student understanding. It also uses media in purposeful ways throughout the curriculum to address different learning styles. By providing multiple representations of key concepts, Apex Learning courses give students the opportunity to engage in active learning by reading, listening, watching, manipulating interactive elements, reflecting, and writing.

In addition to factors related to school structure, researchers suggest that a self-paced curriculum, differentiated instruction, and the availability of choice in the curriculum may improve at-risk learner outcomes (Archambault, et. al., 2010). Because Apex Learning curriculum is self-paced, students can complete guided practice activities until they master the content. The curriculum is embedded with rigorous instruction, scaffolding, supports, and frequent assessment, all of which enable students to acquire a deeper understanding of the content they may have struggled with in a traditional classroom. As struggling students experience success they become motivated to learn, and they develop confidence in themselves as learners.

High-Performing Learners

At-risk learners are not the only students who fall behind. High-performing students get off track for a variety of reasons, including boredom because they aren't being challenged, difficult life circumstances, and scheduling issues that conflict with extracurricular pursuits.

Unlike a traditional classroom experience, Apex Learning courses allow students to work at their own speed. Instead of following the teacher's instructional calendar, students are able to move quickly through material they have already mastered and spend more time delving into areas of interest within the course content. Students become engaged with what they are learning as they make decisions, participate in interactive exercises, and complete challenging but achievable tasks in every lesson. Immediate feedback informs students of their content mastery so that they can take time to review challenging concepts as needed.

The Solution: Recovering Credit with Digital Curriculum

Dorchester School District Two leadership knew they would need to base their credit recovery program on a solid curriculum that could address the needs of a broad range of students with a variety of learning styles and life circumstances. Taking advantage of the strength of a digital curriculum to differentiate instruction, Dorchester School District Two chose Apex Learning Comprehensive Courses to deliver a series of cascading interventions designed to ensure all students graduate on time.

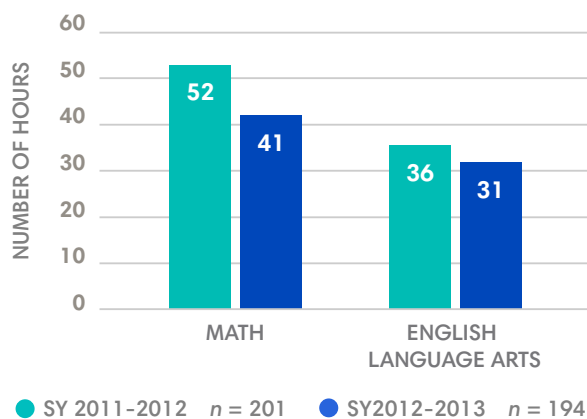
They selected Apex Learning because it provides a rigorous comprehensive high school curriculum that can be delivered in formats ranging from unit remediation to a complete virtual school experience for homebound students.

Apex Learning courses are designed to provide every student—whether they are struggling with literacy or are high performing and in need of enrichment—with an individualized path to access and master a rigorous, standards-based curriculum. Students can move through the curriculum at their own pace, taking additional time to review topics as necessary. Graph 4 shows amount of time students spend engaged in learning a subject. To ensure that all students achieved mastery, Dorchester School District Two chose to use the mastery-based learning option. The mastery-based learning option permits students to move forward in the curriculum only when they demonstrate understanding by achieving a predetermined percent correct on all formative assessments. Dorchester administration established 70 percent correct as a standard for mastery-based learning. Graph 5 represents the average percent correct on embedded assessments students achieved through the school year.

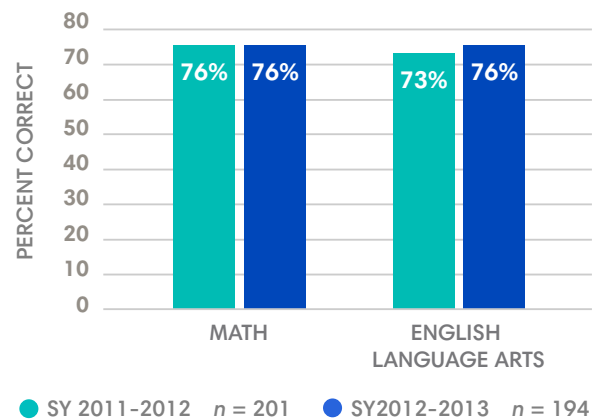
“Whether a student fails one unit in a single subject or is homebound due to a medical disability and completes high school on line, Apex Learning courses offer a rigorous curriculum that can be flexibly delivered to meet a wide range of student circumstances.”

Kenneth Wilson, Ph.D

Director of High Schools and Career/Technical Education
Dorchester School District Two
South Carolina



GRAPH 4:
Average Hours of Apex Learning Use



GRAPH 5:
Average Percent Correct on Embedded Assessments

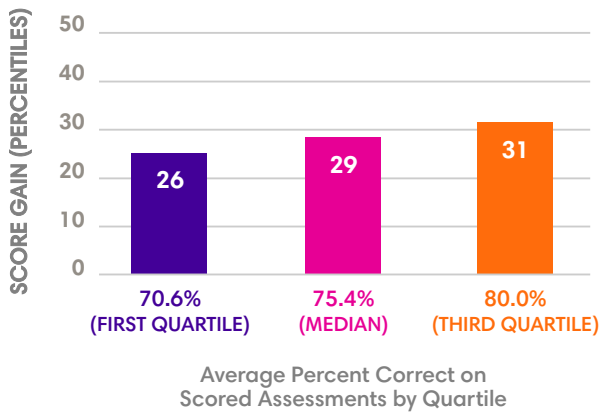
The Result: Increased Achievement for Students Recovering Credit

The results of the third-party evaluation revealed that Apex Learning courses are proven to increase learning gains made by credit recovery students on the South Carolina High School Assessment Program (HSAP) for both school years.

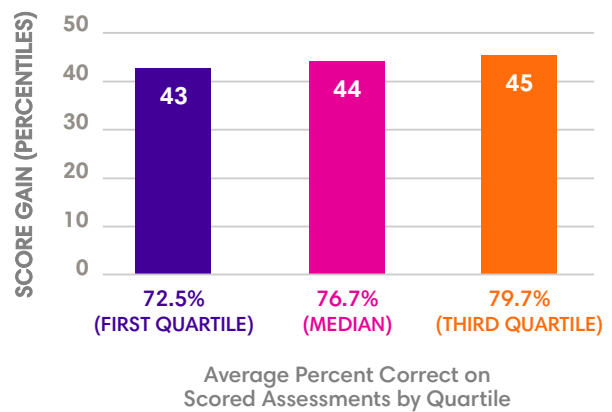
To understand the impact that Apex Learning Comprehensive Courses make on the achievement of credit recovery students, Apex Learning and Dorchester School District Two partnered with a third-party evaluator to study the impact Apex Learning courses have on student performance on the South Carolina High School Assessment Program (HSAP), a state assessment required for high school graduation. The study was initially conducted for the 2011–2012 school year and replicated for the 2012–2013 school year. In both years, researchers investigated the relationship between Apex Learning courses and English language arts and math performance on the HSAP.

Graphs 6 and 7 show the average percent correct score on Apex Learning embedded assessments by quartile. For both school years, a positive relationship was found between students' percent correct scores on Apex Learning assessments and student performance on the HSAP.

Percentile Gain by Quartile



GRAPH 6:
2011–2012 School Year



GRAPH 7:
2012–2013 School Year

In the 2011–2012 school year sample, the average student using Apex Learning courses for credit recovery (median) achieved 75.4 percent correct on their assessments. This percentage correct score is associated with a gain of 29 percentile points on the HSAP English language arts and math assessments. Students in the first quartile, the lowest performing students, scored an average of 70.6 percent correct on the Apex Learning assessments and achieved a 26 percentile point gain, while students in the third quartile, the highest performing students, scored an average of 80 percent correct on the Apex Learning assessments and saw a 31 percentile point gain.

In the 2012–2013 school year, the average student using Apex Learning courses for credit recovery (median) achieved 76.7 percent correct on the embedded assessments. This percent correct score is associated with a gain of 44 percentile points on the HSAP English language arts and math assessments.

Students in the first quartile scored an average of 72.5 percent correct on the Apex Learning assessments and achieved a 43 percentile point gain, while students in the third quartile scored an average percent correct score of 79.7 percent correct on Apex Learning assessments and achieved a 45 percentile point gain.

Student achievement in Dorchester School District Two, as demonstrated by a 29 percentile point gain and a 44 percentile gain during the 2011-2012 and 2012-2013 school years respectively, suggest that partnerships between visionary leadership, supportive teachers, and students engaged in a challenging, high quality curriculum provided by Apex Learning comprehensive courses lead to increased student performance.

References

America's Promise (2012). Dropout Crisis Facts. Retrieved 12/17 /12 from:

<http://www.americaspromise.org/Our-Work/Grad-Nation/Dropout-Facts.aspx# edn1>.

Archambault, L., Diamond, D., Coffey, M., Fours-Aalbu, D., Richardson, J., Zygouris-Coe, V., Brown, R., & Cavanaugh, C. (2010). Research Committee Issues Brief: An Exploration of At-Risk Learners and Online Education. (Vienna, VA: International Association for K-12 Online Learning, April 2010).

Available at: <http://www.inacol.org/research/docs/iNACOL AtRiskStudentOnlineResearch.pdf>.

Dessoff, A. (2009). Reaching Graduation with Credit Recovery. District Administration, Oct 2009. Retrieved 12/17 /12 from:

<http://www.districtadministration.com/article/reaching-graduation-credit-recovery>.

Empirical Education (2012). Dorchester School District Two: A Study of Apex Learning and Student Achievement. (Palo Alto, CA, May 2012). Available at: http://www.apexlearning.com/documents/dorchester_study.PDF

Empirical Education (2013). Dorchester School District Two: A Study of Apex Learning and Student Achievement. (Palo Alto, CA, July 2013). Available at: http://www.apexlearning.com/documents/dorchester_study_year2.pdf

Flora, J., Allen, J., Arnett, M., & Purvis, K. (2009). Leadership for Blended Online Learning: Lessons from Dorchester Two. Palmetto Administrator. Retrieved 12/19/12 from:

<http://www.scasa.org/associations/4167/files/2009%20Fall%20Palmetto%20Administrator%20Magazine.pdf>.

Trotter, A. (2008). Online Options for Credit Recovery Widen. Education Week, 27(38), 1-12.

U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics (2011). The Condition of Education 2011. Retrieved 12/17 /12 from: http://nces.ed.gov/programs/coe/indicator_scr.asp.

Watson, J., & Gemin, B., (2008). Promising Practices in Online Learning: Using Online Learning for AtRisk Students and Credit Recovery. (Vienna, VA: North American Council for Online Learning, June 2008).

Available at: <http://www.inacol.org/research/promisingpractices/NACOL CreditRecovery PromisingPractices.pdf>.



More Learning Happens

Apex Learning puts rigorous, standard-based curriculum within reach for all students—from those struggling to those capable of acceleration—to prepare them for the next course, the next stage in their education, work and life. Schools use Apex Learning digital curriculum because it is proven that more learning happens with the powerful, actionable data that gives educators insight into student performance, and the personalization and engagement students need to succeed. During the 2015–2016 school year, there were more than three million enrollments in Apex Learning Comprehensive Courses for original credit and credit recovery and Adaptive Tutorials for intervention, remediation, and to prepare for high-stakes assessments. Headquartered in Seattle, Apex Learning is accredited by AdvancEd and its courses are approved for National Collegiate Athletic Association eligibility.

Contact

Apex Learning

1215 Fourth Ave., Suite 1500

Seattle, WA 98161

Phone: 1 (206) 381-5600

Fax: 1 (206) 381-5601

ApexLearning.com