

EFFICACY BRIEF

Proven to Increase Learning Outcomes: Results of a Third-Party Study on the Impact of Digital Curriculum

Evansville Vanderburgh School Corporation

January 2014





Table of Contents

04	Summary
05	The Challenge
06	The Solution
06	The Results: Students Using Digital Curriculum Achieve Gains Similar to That of Non-Digital Curriculum Students
07	References

Summary

School districts across the country face the challenge of increasing the rigor of coursework for all students, while simultaneously decreasing the number of students who drop out or fail to graduate on time. Research on students at risk of dropping out suggests that freshmen who fail more than one semester of a core academic course, or who do not earn enough credits to be promoted, are 3.5 times less likely to graduate from high school in four years than on-track freshmen (Allensworth and Easton, 2005, 2007).

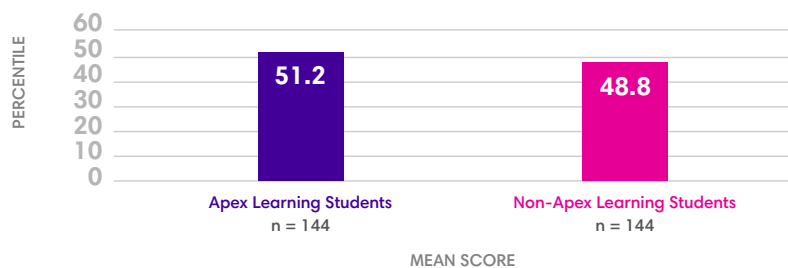
To increase student achievement and keep students engaged, Evansville Vanderburgh School Corporation (EVSC) decided to tap into technology in order to provide students with quality options beyond the traditional classroom, empowering students to meet their individual learning goals. EVSC created online learning environments from blended to full-time virtual learning with the purpose of getting more students excited about learning and keeping them on track toward graduation. Through the EVSC Virtual Academy, students are enrolling in online courses for advancement, early graduation, credit recovery, or for grade replacement to raise their GPA. Building off of the success of the Virtual School, EVSC high schools have begun to offer in-school online classes where students can garner the support of a classroom teacher, yet continue to work at their own pace through the curriculum.

The EVSC vision is to create learning opportunities that are student-centered and challenge students to create and think critically. To achieve this goal, they sought a partner that could provide students with a rigorous standards-based digital curriculum designed to optimize student learning in an online environment, whether virtually or in brick and mortar classrooms. With an expansive digital curriculum catalog in all core academic subjects and many elective content areas, EVSC partnered with Apex Learning. Each Apex Learning Comprehensive Course is developed to make a challenging curriculum accessible, so that regardless of their academic readiness, all students can achieve success.

To understand the impact of Apex Learning Comprehensive Courses on students' academic outcomes, a third-party study was conducted to compare the achievement of students using Apex Learning courses to similar non-Apex Learning students in Evansville, Indiana, during the 2011-2012 school year.

GRAPH 1:

Average Pooled (ISTEP+) End of Course Assessment Scores



Graph 1 shows the average ISTEP+ End of Course Assessments (ECA) scores for both groups of students.

Proven to Increase Learning Outcomes: Results of a Third-Party Study on the Impact of Digital Curriculum

The two groups were equivalent in terms of SES, race/ethnicity, and gender. Furthermore, both groups had the same average eighth-grade reading and math achievement scores on the Indiana State Test of Educational Progress (ISTEP) prior to high school.

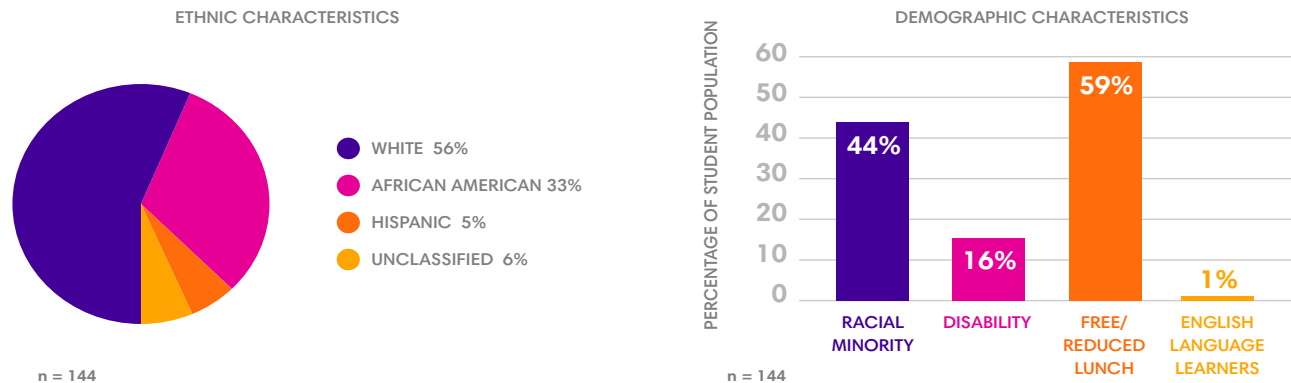
EVSC students enrolled in Apex Learning Comprehensive Courses consisted of students seeking initial credit and those in need of credit recovery. Credit recovery students completed courses in a designated classroom with a certified teacher, who provided support to students as needed. The students seeking initial credit completed courses as part of the EVSC Virtual Academy. The non-Apex Learning students completed work in a traditional classroom.

Graph 1 shows the average ISTEP+ End of Course Assessments (ECA) scores for both groups of students. “Overall, students using Apex Learning courses achieved similar academic gains as comparable non-Apex Learning students” (Action Research and Associates, 2013).

GRAPH 2:

Demographic Characteristics of Apex Learning

The following charts represent the demographic characteristics of the EVSC students enrolled in Apex Learning courses.



The Challenge

When the state of Indiana ruled that a computer could be considered a textbook, EVSC began to offer online courses, thus increasing options for earning initial credit and recovering credit. EVSC was especially concerned that their curriculum partner be able to provide online courses that were rigorous and standards-based, but that also addressed the needs of students reading below grade level. “Students like learning online, and providing students with academic choices that meet their learning needs—without sacrificing quality—was a priority in our district,” said Janet Leistner, director of the virtual program.

Note: ISTEP+ End of Course Assessment scores were converted to standardized z-scores for purposes of comparison. The resulting z-scores are reported here as percentile scores for ease of interpretation.

The Solution

EVSC administrators implemented an online learning program in which students of all readiness levels could complete Apex Learning Comprehensive Courses to earn initial credit or recover credit and get back on track to graduate on time. “We chose Apex Learning because their courses are rigorous, but at the same time provide the scaffolding students need to be successful,” Leistner said. “Some students are struggling readers while others benefit from enrichment activities,” she added. Apex Learning courses, which are differentiated by pathway, come with scaffolding to meet students at their learning-readiness levels. “Apex Learning courses meet students’ individual needs so that they can control their learning experience,” Leistner said.

EVSC students using Apex Learning to recover credit online completed course work in a designated classroom staffed by a certified teacher. The students seeking initial credit completed their coursework virtually. In both scenarios, Apex Learning courses provide direct instruction that employs active learning to keep students engaged as they study the full range of academic units and complete course activities. “They work at their own pace and appreciate being able to choose a different approach if they missed or didn’t understand part of the lesson,” Leistner said. If students experience difficulty mastering any of the material, they use the built-in supports to have the content presented to them in a different way.

The Virtual Academy creates expanded learning opportunities for students seeking grade replacement to increase their GPA, academic advancement, or early graduation. For students recovering credit, whether they failed one semester, two semesters, or the end of course exam, Apex Learning Comprehensive Courses provides students the flexibility they need to master the specific content that was challenging them in a traditional classroom environment. Some students use Apex Learning courses to retake an entire course, whereas, other students test out of units they have already mastered by successfully completing the unit test, allowing them to focus on content they need to master in order to successfully pass the course.

Apex Learning curriculum provides an individualized learning experience that allows students to work at their own pace and focus on the content that has not yet been mastered. Whether students are working toward earning initial credit or recovering credits, teachers monitor students’ progress as they work through the material to ensure students stay on track toward course completion.

“We chose Apex Learning courses because their courses are rigorous, but at the same time provide the scaffolding students need to be successful.”

Janet Leistner

Director of the
Virtual Program

The Results: Students Using Digital Curriculum Achieve Gains Similar to That of Non-Digital Curriculum Students

The results of the third-party evaluation revealed that Apex Learning Comprehensive Courses increased the learning gains made by students on the ISTEP+ECA. “Overall, students using Apex Learning courses achieved similar academic gains as comparable non-Apex Learning students” (Action Research and Associates, 2013)¹

To examine the achievement of students who used Apex Learning courses, a third-party evaluator compared (ECA) outcomes of students using Apex Learning courses to a matched comparison group of students who did not use Apex Learning courses.

Proven to Increase Learning Outcomes: Results of a Third-Party Study on the Impact of Digital Curriculum

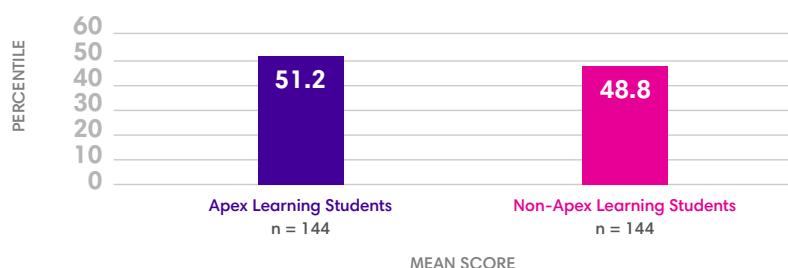
On average, the pre-test standardized z-scores on their eighth-grade ISTEP reading and math assessments were equivalent for the two groups (Action Research and Associates, 2013). Graph 3 shows the two groups were also equivalent in terms of SES, race/ethnicity, and gender. The study was conducted on student data collected from the 2011–2012 school year.

As shown in Graph 3, the average performance of students using Apex Learning courses and the comparison group on the post-test (ISTEP+ECA), pooled across disciplines.

The results also demonstrate that for those students completing Apex Learning courses for credit recovery, they achieve at the same level as their peers completing courses for initial credit in the traditional classroom. When students are able to work at their own pace, engage in active learning to master a challenging curriculum, and receive targeted support as needed, they are able to master rigorous standards-based curriculum and perform as well as their peers.

GRAPH 3:

Average Pooled (ISTEP+) End of Course Assessment Scores



1 The 8th grade pretest scores were generated by the ISTEP Reading Test and ISTEP Mathematics Test administered between 2007 and 2011. For both assessments, the range of standardized scores for tests administered in 2007–2008 was not the same as the range of scores in 2009–2011. In order to make the pretest scores comparable across years, z-scores were computed.

References

Action Research and Associates (2013). *Evansville Vanderburgh School Corporation: A study of Apex Learning's digital curriculum's effects on student achievement*. (Ellicott City, MD: September 2013). Retrieved 9/16/13 from: http://www.apexlearning.com/documents/EVSC_Action_Research_.pdf

Allensworth, E., and Easton, J. (2005). *The on-track indicator as a predictor of high school graduation*. Chicago: Consortium on Chicago School Research. Retrieved 9/16/13 from: <http://ccsr.uchicago.edu/sites/default/files/publications/p78.pdf>

Allensworth, E., and Easton, J. Q. (2007). *What matters for staying on-track and graduating in Chicago Public High Schools: A close look at course grades, failures and attendance in the freshman year*. Chicago: Consortium on Chicago School Research. Retrieved 9/16/13 from: <http://ccsr.uchicago.edu/publications/what-matters-staying-track-and-graduating-chicago-public-schools>

The Education Commission of the States. (2011). *The progress of education reform: Credit recovery and proficiency-based credit*. Denver, CO. Retrieved 9/16/13 from: <http://www.ecs.org/clearinghouse/94/23/9423.pdf>

Greaves, T. W., and Hayes, J. (2008). *America's digital schools 2008: Six trends to watch*. Encinitas, CA: The Greaves Group. Retrieved 9/16/13 from: http://www.schooldata.com/pdfs/ADS08_intro.pdf

Wheelock, A. and Miao, J. (2005). *The ninth-grade bottleneck: An enrollment bulge in a transition year that demands careful attention and action*. Washington, DC: The American Association of School Administrators. Retrieved 9/19/13 from: <http://www.aasa.org/SchoolAdministratorArticle.aspx?id=8728>



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