

EVALUATING THE
SUCCESS
INTERVENTION FOR
ALGEBRA 1 ECA
RETESTERS

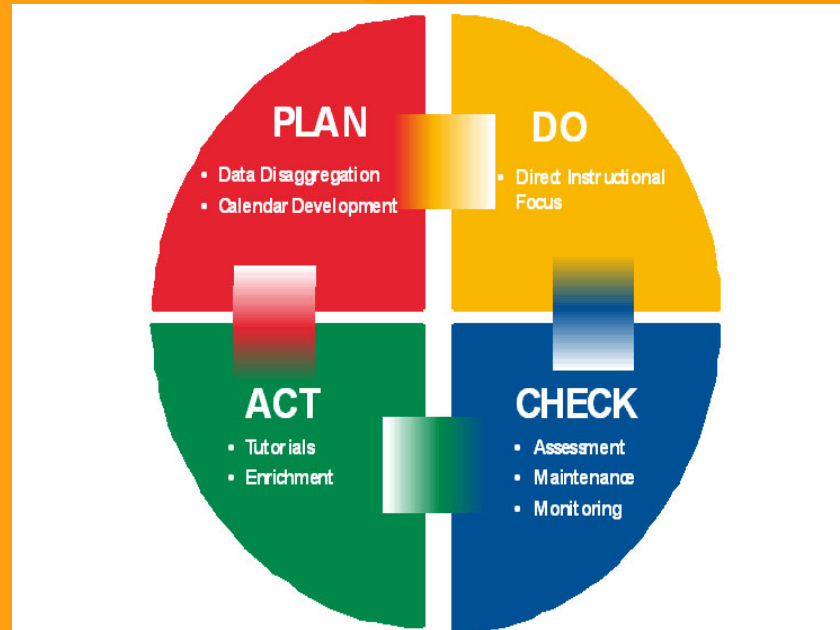


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WHAT IS SUCCESS?



Rationale

Success is an 8-step data-driven intervention designed for implementation in Indiana, in order to improve test scores and school grades. The process utilizes data and assessment to understand where deficits/strengths in achievement are and aids in grouping students accordingly. This format is results-oriented with main components of Plan, Do, Check and Act. The Algebra 1 and English 10 End of Course Assessments (ECAs) determine students' readiness for graduation. Many students are falling short of this goal. The target Success group for this study was the Algebra 1 remediation group. These are students who have not passed the Algebra 1 ECA. Math teacher, Julian Ravenscroft, led the 22-minute Success intervention for the 2014-15 school year.

METHOD

This program was assessed through viewing the students Algebra 1 ECA test scores for Spring 2013-14 and Winter 2014-15.

There was also a qualitative component, consisting of observations and an interview with the primary Algebra 1 Success teacher.

ASCA STANDARDS

Standard B: Students will complete school with the academic preparation essential to choose from a wide range of substantial post-secondary options, including college.

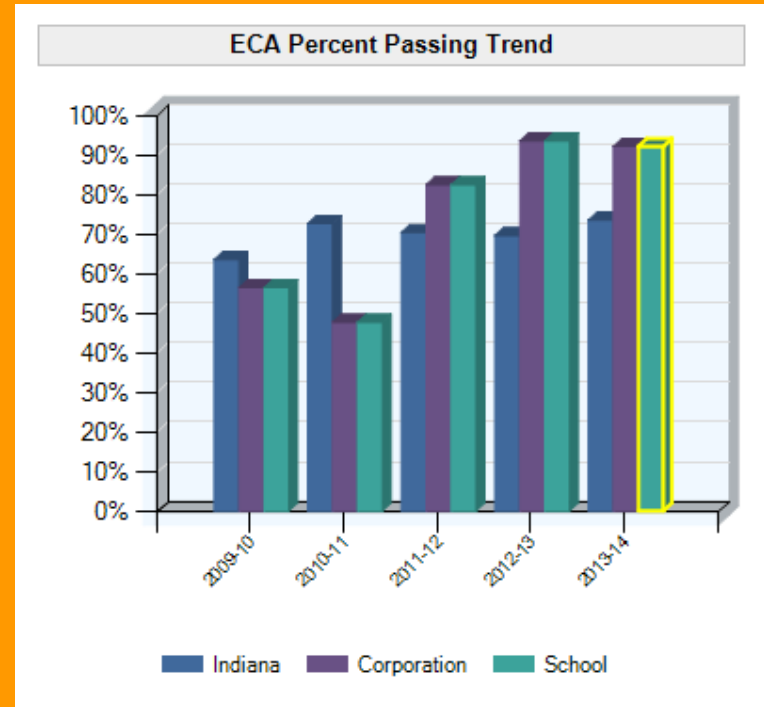
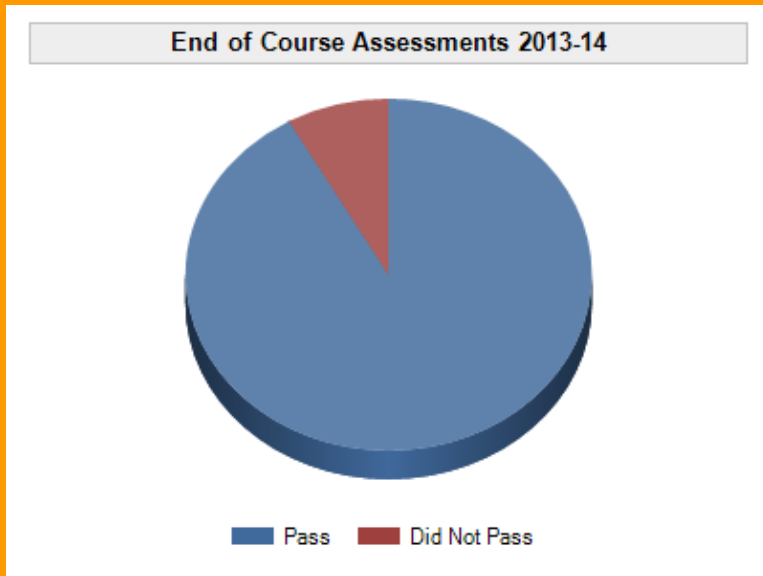
A:B1.1 Demonstrate the motivation to achieve individual potential A:B1.2 Learn and apply critical-thinking skills

A:B1.3 Apply the study skills necessary for academic success at each level

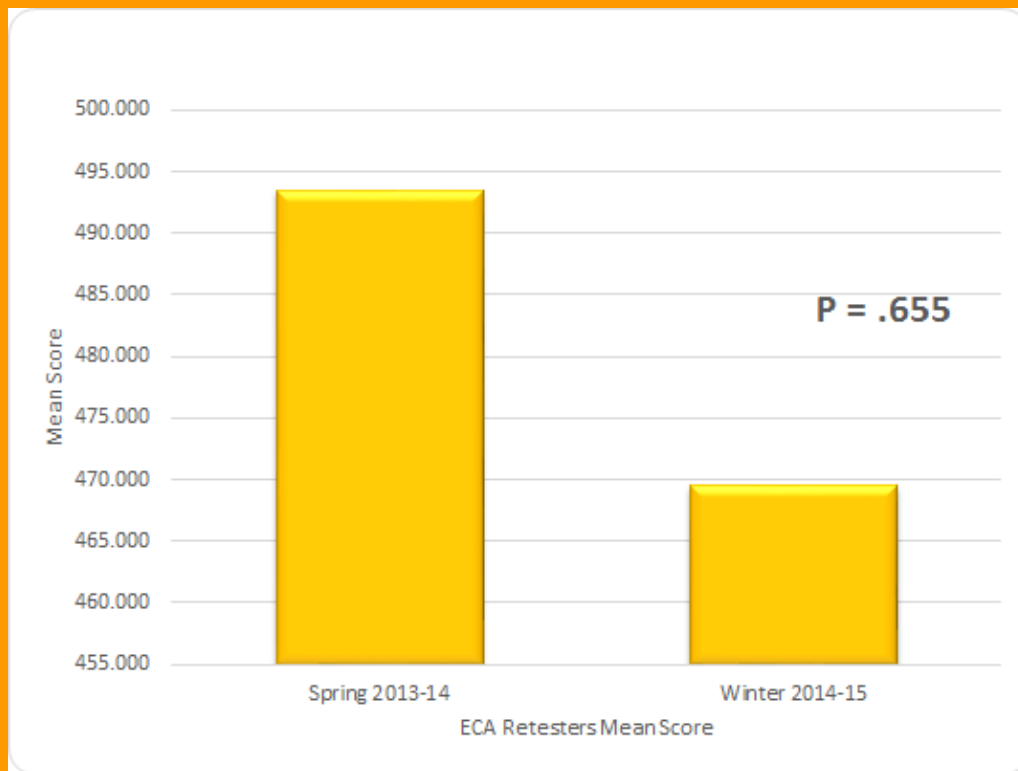
A:B1.4 Seek information and support from faculty, staff, family and peers A:B1.5 Organize and apply academic information from a variety of sources

A:B1.6 Use knowledge of learning styles to positively influence school performance

A:B1.7 Become a self-directed and independent learner

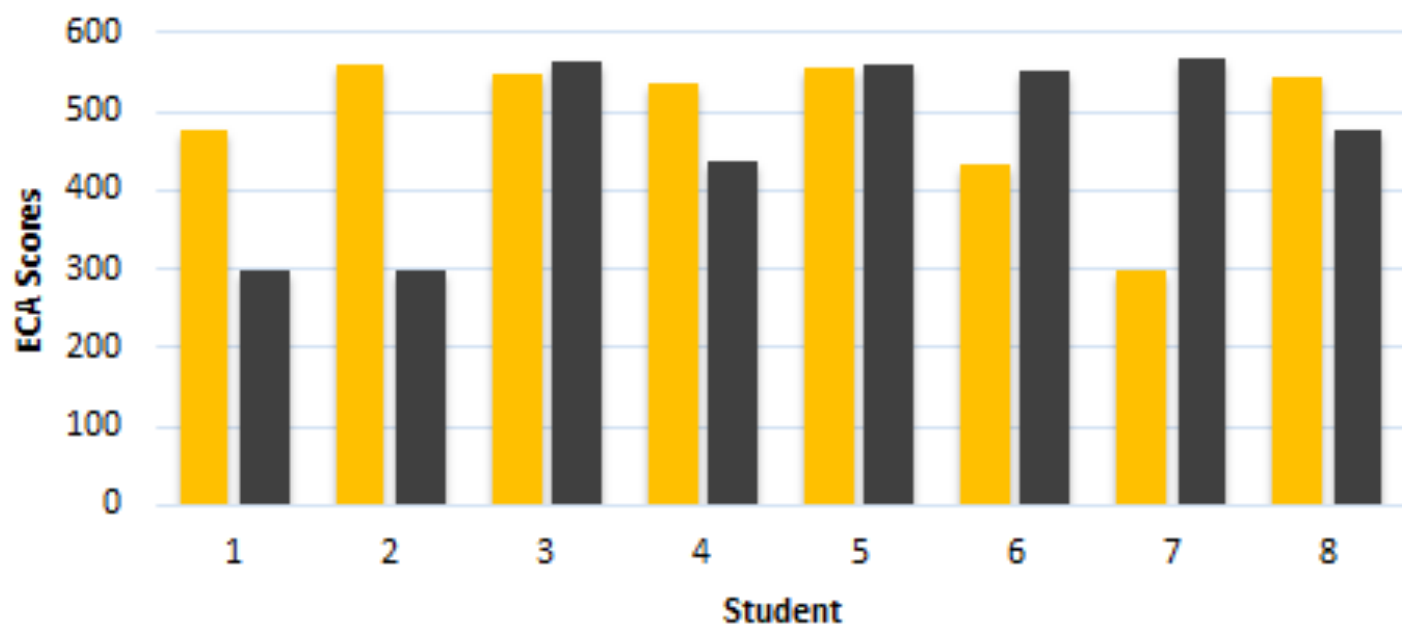


Daleville Jr-Sr High School Algebra 1 ECA Passing Trend (IDOE, 2014)

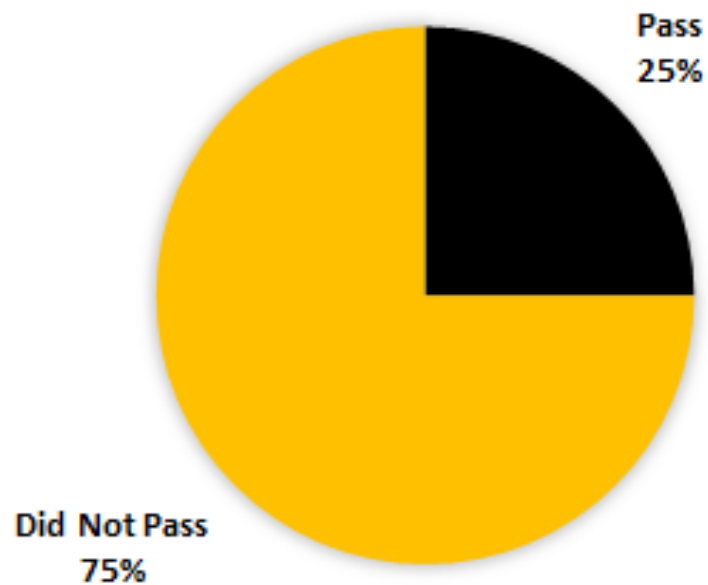


Mean scores from Spring 2013-14 to Winter 2014-15

Student Scores from Spring 2013-14 to Winter 2014-15



PASS RATE FOR WINTER 2014-2015



RESULTS

Scores for the Spring and Winter testing window were compared. A paired t-test was run, demonstrating a p-value of $p = .655$. This score was well above the recommended p-value ($p = .05$) indicating that there was no significance. Overall pass rate for the retesters was 25%

An interview with the primary Success teacher indicated that Algebra 1 Success would be more effective if math teachers were the sole deliverers, the period were a full 30 minutes, and if lesson plans were followed more completely. He also pointed out that students who are chronic absentees also have consistently lower scores.

The aforementioned factors were also noted by the observer. Students seemed unengaged because of the short nature of the class. It was also noted that there is no attendance measure in place for the Success period. This may impact student adherence to attendance rules.

DISCUSSION

Based solely on student ECA scores for two testing periods it would seem that Success is not a practical or useful intervention for these students; however, there are other factors to be considered. The Algebra Success teacher is not able to have all the ECA remediation students in his room during Success, so there are multiple teachers delivering his lesson plans to students. Differences in teaching style and in the teachers' major content areas may have an impact on student scores. Additionally some students are also enrolled in an Algebra enrichment period and/or attend after school study tables for Algebra remediation. Those students who only receive remediation during Success period, may not be as prepared for testing. Other factors such as absenteeism and lack of engagement may also have contributed. Even with all of these factors there are students passing and many students that did not pass in the Winter made major individual improvements.

Recommendations

Success is an intervention that should continue at Daleville Junior-Senior High School. It is not perfect and there is always room for improvement, but there is evidence of its effectiveness. Recommendations for the programs continued improvement are as follows:

- 1) Teachers for the Algebra 1 Success group should be math teachers.
- 2) Teachers should rigorously follow the lesson plan developed by the primary teacher.
- 3) An attendance method should be implemented for the Success period.
- 4) Students should be placed in both the Algebra 1 enrichment class as well as the Success period.
- 5) Implement more activity based instruction, students were more engaged when games were involved.