High School Students More Than Double Passing Rate on the State Mathematics Test

**Research Brief**

**Lufkin Independent School District**

**LUFKIN, TEXAS**

<table>
<thead>
<tr>
<th>Evaluation Overview</th>
<th>Sample Demographics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grade:</strong> 10</td>
<td>![Pie Chart]</td>
</tr>
<tr>
<td><strong>Model:</strong> Flex Model</td>
<td></td>
</tr>
<tr>
<td><strong>Measure:</strong> Texas Assessment of Knowledge and Skills (TAKS) Mathematics Test</td>
<td>Hispanic 37%</td>
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<tr>
<td></td>
<td>African American 36%</td>
</tr>
<tr>
<td></td>
<td>Caucasian 27%</td>
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</tbody>
</table>

**District Overview**

Lufkin Independent School District (LISD) is located in east Texas, approximately 120 miles north of Houston and 166 miles southeast of Dallas. The district enrolls 8,588 students in PK–12th grade. Approximately 64 percent of students qualify for free or reduced-price lunch.

**Implementation**

After realizing that a persistent group of students was failing courses, LISD recognized that they needed a solution to help students recover credits and bolster their skills. To address this problem, LISD examined a number of different online providers and chose Edgenuity because of its customizable content.

Beginning in the summer of 2011, LISD offered students who did not pass the spring 2011 TAKS Mathematics test the chance to take Edgenuity courses during summer school.

Courses were offered in a computer lab five hours a day, four days a week, for six weeks. Each lab was supported by a highly qualified teacher. The teacher monitored student performance and advancement, provided tutoring, and used Edgenuity's learning management system to customize course content and to provide targeted instruction.

Results revealed a more than two-fold increase in the percentage of tenth-grade Edgenuity students who passed the TAKS Mathematics Test from 2011 to 2012.
**Study Sample**

Forty-five tenth-grade students were included in the sample described in this report. Of these, 36 percent were African American; 27 percent were Caucasian; and 37 percent were Hispanic.

**Measures**

**Edgenuity Program Data**

Edgenuity's Web Administrator tracks student engagement, achievement, and progress. This study collected data on the total number of attempted courses, the average percent of courses completed, and the average overall grade.

**The Texas Assessment of Knowledge and Skills**

The TAKS is used to evaluate student performance in grades 3–10. The tests report student performance as one of three performance levels (Did Not Meet the Standard, Met the Standard, and Commended Performance). In order to pass the test, students must meet or exceed the standard.

**Enrollment Data**

This study tracked dropout and graduation data for tenth-grade students enrolled in Edgenuity courses.

**Results**

**Participation Level**

Course usage data were collected and analyzed from 45 tenth-grade LISD students who used Edgenuity courses. Table 1 provides descriptive data on program use. Overall, students completed 99 percent of their Edgenuity courses.

**Enrollment Results**

Attendance data revealed that none of the at-risk tenth-grade students withdrew (see Graph 1). Further, 27 percent of Edgenuity students who were repeating tenth grade in the 2011–2012 school year graduated on schedule in 2012.

**The Texas Assessment of Knowledge and Skills**

Data were collected from 30 Edgenuity students who did not pass the spring 2011 TAKS Mathematics test and retested in spring 2012. Results revealed a more than two-fold increase in the percentage of tenth-grade Edgenuity students who passed (p < .05) (see Graph 2).

**Table 1: Lufkin Independent School District Edgenuity Students, Grade 10 (N = 45)**

Edgenuity Course Usage Data from August 23, 2010 through August 1, 2011

<table>
<thead>
<tr>
<th>Grade in Fall 2010</th>
<th>Total Number of Courses</th>
<th>Average Number of Courses per Student</th>
<th>Average Percent of Course Completed</th>
<th>Average Overall Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>93</td>
<td>2.1</td>
<td>99%</td>
<td>79%</td>
</tr>
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</table>

*96 percent of courses were taken during summer (June/July) 2011.
Conclusion

Students who participated in Edgenuity courses made significant improvements on the TAKS Mathematics test. The percentage of Edgenuity students who passed the TAKS Mathematics test more than doubled between 2011 and 2012. Furthermore, despite all being at risk, none of the students withdrew from school.