Texas Data Shows Engagement with Technology Improves Student Skills

During the 2014-2015 school year, Learning.com conducted a study of students in Texas who participated in an assessment of digital literacy skills, combined with intervention using the Learning.com EasyTech digital literacy curriculum.

Collecting the Data

In 2011 Learning.com, in partnership with the Texas Computer Education Association (TCEA), began providing 8th grade students in the state of Texas a digital literacy post-assessment; a valid, reliable classroom-based assessment that measures and reports student competencies in critical technology concepts identified in the Technology Applications - Texas Essential Knowledge and Skills (TA-TEKS). Since then, Learning.com has delivered over 600,000 assessments to participating Texas districts. Many districts chose to also utilize the TCEA pre-assessment which provides data on student's abilities early in the school year so appropriate instructional decisions and interventions could be made.

Setting the Baseline for Proficiency

In early fall of 2014, students were given the TCEA pre-assessment to baseline their digital literacy ability and the results were reported in a district comparison to all districts in the state in aggregate, by district, building, class and student. Proficiencies were divided into four levels: below basic, basic, proficient and advanced.

The TCEA post-assessment was administered prior to the end of the school year to measure the gains in student proficiency and digital literacy skills.

The study included a sample of 10,859 eighth grade middle school students selected from a population of 156,348 students in 251 Texas districts identified as TCEA assessment participants during the 2014-15 assessment window. Only those students who took both the pre and post-assessment were included in the sample.

Performance Shows Improvements

Results from the study show gains in the number of students becoming proficient. Overall, those who were more engaged with the digital literacy curriculum showed greater gains over the period of study. Moreover, those students who regularly engaged with the digital literacy curriculum demonstrated an increased digital literacy proficiency four-fold over those who did not.

- The more students engaged with EasyTech, the more the digital literacy of the students increased as measured by the TCEA pre and post-assessments.

- Students who used the EasyTech solution consistently during the period of study increased their digital literacy proficiency by close to four times over their peers who did not.

- Students that measured as non-proficient on the pre-assessment (Basic or Below Basic) and subsequently launched additional EasyTech content items were significantly more likely to achieve proficiency on the post-assessment.