August 1, 2011

Research shows EasyTech greatly advances student technology literacy

Two recent Texas studies make a strong case for using Learning.com to teach tech apps. The first study looked at eighth grade students at one school in a Texas ISD. The second study looked at student performance across all schools in the same Texas ISD. Both studies explore the benefits of technology literacy on overall learning and the best way to impact tech literacy and affect positive changes on student learning.

Conclusions from both studies indicate that Learning.com products and services affect powerful positive changes in student outcomes. Learning.com is an excellent choice to meet the TA TEKS, satisfy Texas Education Code requirements and improve student performance.

Background:

The Texas Education Code (TEC) 28.002 requires districts to provide Technology Applications TEKS (TA TEKS) as a required enrichment curriculum for students in Pre-Kindergarten through Grade 12. The focus of this curriculum is on the teaching, learning, and integration of digital technology knowledge and skills across the curriculum. Its primary emphasis is on the core curriculum areas to support learning and promote student achievement.

Summary of conclusions:

- Learning.com products and services support middle school tech literacy curriculum and technology integration
- Tech literacy improvements have a positive effect on reading and math scores
- Usage of EasyTech modules on Learning.com increase tech literacy assessment scores

The Studies

1. Technology Applications

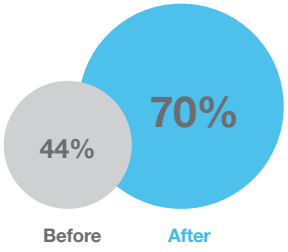
A comparative study of tools and methodologies for teaching Tech Literacy

The first of these studies investigated the effectiveness of various instructional methods for teaching Technology Applications to eighth grade students at a school with a predominantly black and Hispanic, lower-income population near Houston, Texas.

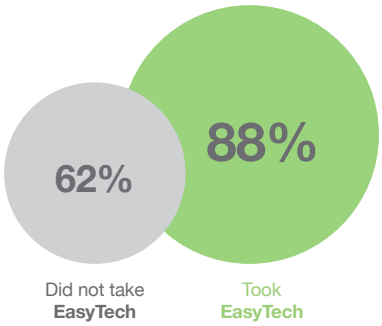
Researchers divided the students into groups. They gave each group a technology literacy assessment (TLA) before the study to provide a baseline for performance. A TLA at the end of the study provided data about student comprehension and achievement as measured by improvement over the baseline. Scores were also compared with districtwide benchmarks. This data was then used to compare and contrast the various teaching tools and methodologies included in the study.

The findings were impressive - EasyTech makes a huge difference

- Students who took a semester of dedicated **EasyTech** instruction improved their tech literacy scores by 18% in a year.
- Over two years of study, students passing tech literacy requirements increased from 44% to 70%.
- Students who did not take the **EasyTech** course had a passing rate of 62% while students who had EasyTech and technology integrated into their learning had a passing rate of 88%.



Students passing tech literacy requirements



Students who took EasyTech vs. Students who did not

Success factors - why EasyTech is better

The study outlined several key features of **EasyTech** that contributed to higher levels of teacher and student success:

- **EasyTech** is designed for middle school students
- Educational content is appropriate, engaging, and flexible
- **EasyTech** is easy to integrate, increasing learning opportunities
- Differentiating instruction to meet students differing abilities is essential—**EasyTech** makes this easy for teachers to implement

Additional benefits of tech literacy

This study makes the claim that beyond meeting mandates for tech literacy instruction there are additional benefits that accrue for students who master 21st century skills and apply those skills in the classroom:

- New opportunities to express their creativity arise and, as a result
- Engagement and motivation increases across schoolwork, and
- Academic success follows

The study suggests **reading and math scores have been shown to improve by 13 and 14%** in schools where tech literacy improvements have been made—though the study also suggests that other factors may have contributed to these improvements.

Supporting teachers is essential

Expecting all teachers to have similar success without additional support is unreasonable. Even in districts with a high degree of commitment to teaching tech applications, teacher skills and knowledge vary widely. This can be a barrier to student success and creates unrealistic expectations at every level. However, most teachers with adequate support and proper training can overcome these barriers.

[Ed. note: Learning.com's WayFind and professional development services build teacher skills to meet these needs and support improved tech literacy performance.]

High school readiness is essential

In a final note, the study's authors point out that in high school the gap of those students that are prepared in technology versus those that aren't can widen exponentially. Addressing student tech literacy needs in middle school is therefore critically important.

Conclusion

This study supports the importance of a middle school foundational class in technology and the use of Learning.com products and services to support the curriculum and technology integration.

2. Technology Literacy

Technology Literacy across a district

This action research project investigated instructional resources used for teaching and assessing Texas Essential Knowledge and Skills objectives for Technology Applications (TA TEKS). 5,109 eighth grade students across all schools in one Texas district participated in a technology literacy assessment (TLA) in May, 2010. Based on data collected, this study provides evidence that students who use technology frequently at school and at home show mastery of technology applications TEKS by the end of eighth grade and that Learning.com resources have positively impacted student achievement on the TLA.

Technology Literacy and Student Achievement

This study makes the case that there is a strong correlation between technology literacy, overall learning and student achievement. The study's authors note:

- "On average, students who used computer-based instruction scored at 64th percentile on tests of achievement compared to students in the control conditions without computer who scored at the 50th percentile."
- "students learn more in less time when they receive computer-based instruction," and
- "students like their classes more and develop more positive attitudes when their classes include computer-based instruction."
- "students in technology-rich environments experienced positive effects on achievement in all major subject areas," and
- "students in technology-rich settings showed increased achievement in preschool through higher education for regular and special needs children."

EasyTech doubles district goals for improvement in Tech Literacy

The data indicates that **EasyTech** had a positive impact on student technology literacy. The number of campuses meeting proficiency also increased.

- It is significant that **the highest scoring campus accessed EasyTech more than any other campus.**

Conclusion

This study provides evidence that student exposure to technology at school and home, usage of **EasyTech** modules in Learning.com, campus computer labs used for technology integration projects, and/or the completion of the TLA Review Modules prior to the TLA exam collectively or individually positively influenced campus TLA scores.

The students with the highest TLA scores visited the computer labs most often, had the greatest number of computers in the home and utilized **EasyTech** to reinforce TA TEKS.

Finally, the study recommended: "We would like to continue our study by reviewing the impact of adding and using lessons in **EasyTech**, assessing teachers' technology skill level and possibly implementing a one-to-one laptop initiatives for eighth-grade students."

EasyTech

Make it easy to integrate technology and 21st century skills into your teaching

What if you could make it so simple for teachers to integrate technology and critical 21st century skills into what they're already teaching that even tech novices would be on board? EasyTech is a K-8 technology literacy curriculum that integrates technology, 21st century skills, and PD into core instruction. EasyTech helps students learn the way they live and teachers learn how to teach 21st century standards.

To request copies of the full studies, contact your Learning.com Texas representative at 800.580.4460.