Integrating Technology in the Classroom

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The number one benefit of information technology is that it empowers people to do what they want to do. It lets people be creative. It lets people be productive. It lets people learn things they didn’t think they could learn before, and so in a sense it is all about potential.

-Steve Ballmer

Steven Ballmer is an American businessman who was CEO of Microsoft Corporation for 14 years before stepping down in 2014 to purchase the Los Angeles Clippers, an NBA basketball team.

How does technology empower people to do what they want to do?

How has technology allowed us to be creative? (creating music, designing graphics)

More productive? (anytime, anywhere)

Learn more things? (YouTube™ videos)
What is Technology?

Machinery and equipment developed from the application of scientific knowledge

How often do you think we have to upgrade technology?
Technology may Include:

- Computers
- iPads
- iPhones
- Laptops
- Smart boards
- Smart phones
- Tablets
- And much more!

These are a few of the items considered to be technology.

Refer to word cloud from Anticipatory Set.
Technology integration may be a 1 to 1 or BYOD (see definitions).

1:1 Technology - Providing each student with a laptop or tablet to make learning more individualized, increase independence and extend academics beyond the classroom.

Bring your own device (BYOD) - The practice of allowing the employees of an organization to use their own computers, smartphones or other devices for work purposes.
Effective technology integration is achieved when the use of technology is routine and transparent and when technology supports curricular goals.
Projects Equipped with Technology

Allows students to:
• Be intellectually challenged
• Acquire and refine analysis and problem solving-skills
• Find, process and synthesize information found online

This will also provide students with a realistic view of what the modern office may look like.
The use of technology in the classroom has the added benefits of students being more engaged and staying on task.

It has also reduced the behavioral problems.
What are technology applications?

Curriculum that includes the teaching and learning of technology skills and the use of computers and other related electronic tools.

Refer to the following:
- TEKS for Technology Applications – Elementary
- TEKS for Technology Applications – Middle Schools
- TEKS for Technology Applications – High School
- TEKS for Technology Applications – Other Technology Application Courses (see All Lesson Attachments tab)

These documents may be placed on a light projector as you discuss the standards.
Refer to the document from the Texas Education Agency:
• Technology Application Standards

This document was approved in May of 2000. How do you think technology has changed in since then?

We will look at the first five standards as they pertain to ALL teachers.
All teachers use technology-related terms, concepts, data input strategies and ethical practices to make informed decisions about current technologies and their applications.

Review page 1 and 2 and the components for:

- **Teacher Knowledge: What All Teachers Know**
- **Application: What All Teachers Can Do**

Is there anything listed that surprises you?
All teachers identify task requirements, apply search strategies and use current technology to efficiently acquire, analyze and evaluate a variety of electronic information.

Review page 3 and the components for:

- **Teacher Knowledge: What All Teachers Know**

- **Application: What All Teachers Can Do**

Is there anything listed that surprises you?
Review page 4 and 5 and the components for:

- **Teacher Knowledge: What All Teachers Know**
- **Application: What All Teachers Can Do**

Is there anything listed that surprises you?
Standard IV

All teachers communicate information in different formats and for diverse audiences

Review page 6 and 7 and the components for:

• **Teacher Knowledge: What All Teachers Know**

• **Application: What All Teachers Can Do**

Is there anything listed that surprises you?
All teachers know how to plan, organize, deliver and evaluate instruction for all students that incorporates the effective use of current technology for teaching and integrating the Technology Applications Texas Essential Knowledge and Skills (TEKS) into the curriculum.

Review page 8 and 9 and the components for:

- **Teacher Knowledge: What All Teachers Know**
- **Application: What All Teachers Can Do**

Is there anything listed that surprises you?
According to the **No Child Left Behind – Enhancing Education Through Technology Act of 2001**, two goals were addressed:

**Goal: Technology Literacy** - Assist every student in crossing the digital divide by ensuring that every student is technology literate by the time the student finishes the eighth grade, regardless of the student’s race, ethnicity, gender, family income, geographic location, or disability. The state defines a “technology literate” student as one who has mastered the Technology Applications TEKS for grades K-8 (19 TAC, Chapter 126).

**Goal: Curriculum Integration** - Ensure ongoing integration of technology into school curricula and instructional strategies in all schools in the State so that technology will be fully integrated into the curricula and instruction of the schools. Teachers and librarians use technology standards (for students, teachers, and librarians) to document meeting expectations for teaching and learning with technology. The Long-Range Plan for Technology (LRPT), 2006-2010, references technology standards as well. The LRPT is described below.

Are we meeting those goals?
An Introduction to Technology Integration

Integrating technology with classroom practice can be a great way to strengthen engagement by linking students to a global audience, turning them into creators of digital media, and helping them practice collaboration skills that will prepare them for the future.

http://youtu.be/d59eG1_Tt-Q
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References and Resources

Images:
- Shutterstock™ images. Photos obtained with subscription. (Slides 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19)

Websites:
- Texas Education Agency
- Technology Standards for Students, Teachers, and Librarians
  http://tea.texas.gov/Curriculum_and_Instructional_Programs/Learning_Support_and_Programs/Technology_Resources/Technology_Standards_for_Students,_Teachers,_and_Librarians
- U.S. Department of Education
  Part D — Enhancing Education Through Technology
  http://www2.ed.gov/policy/elsec/leg/esea02/pg34.html
- Why Integrate Technology into the Curriculum?: The Reasons Are Many
  There's a place for tech in every classroom:
  http://www.edutopia.org/technology-integration-introduction

YouTube™:
- An Introduction to Technology Integration
  Integrating technology with classroom practice can be a great way to strengthen engagement by linking students to a global audience, turning them into creators of digital media, and helping them practice collaboration skills that will prepare them for the future.
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