

INTEGRATING ICTs in TEACHING AND LEARNING

ACCESS, DIVERSITY & INCLUSION

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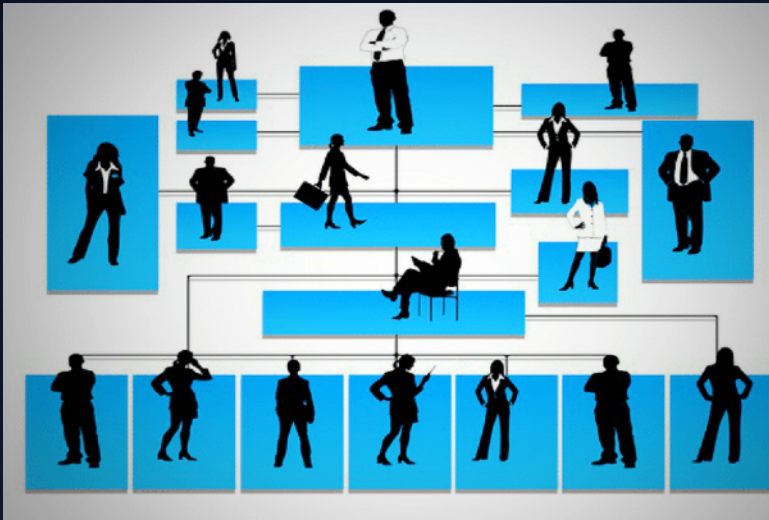
Technology can become
the “wings” that will allow
the educational world to fly
farther and faster than ever
before - if we will allow it.

Jenny Arledge | CTE Director, Sulphur Springs ISD, Texas,
USA

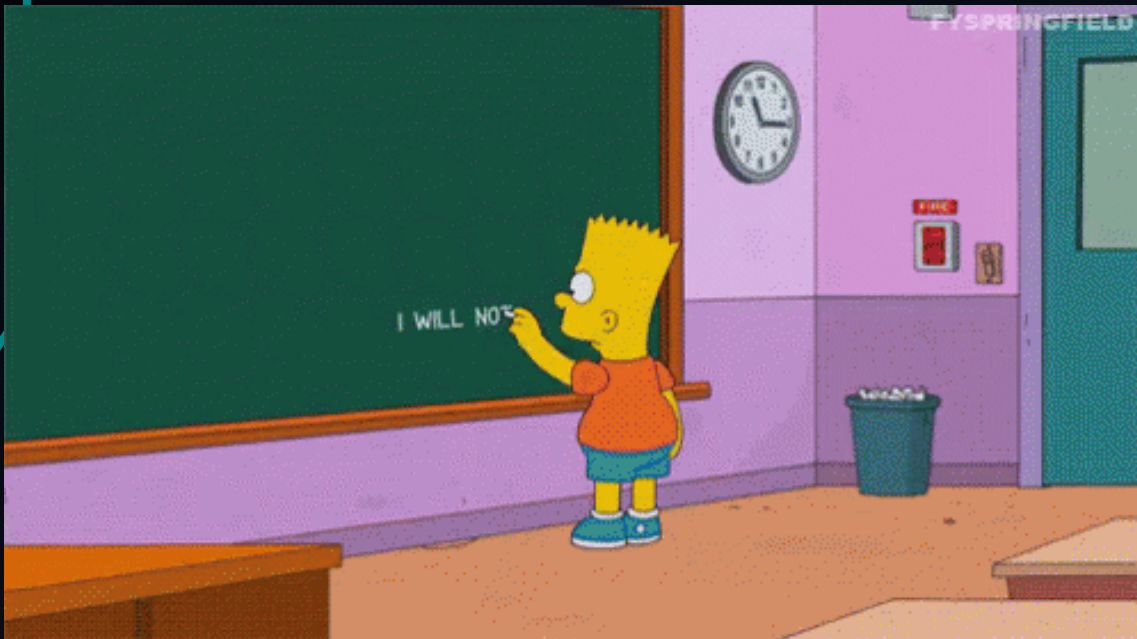




What is ICT?



Role of ICT Primary Education



21ST CENTURY SKILLS

HOW TODAY'S STUDENTS
CAN STAY COMPETITIVE
IN A CHANGING JOB MARKET

Learning Skills

Critical Thinking



Creativity



Collaboration



Communication



Literacy Skills

Information



Media



Technology



Life Skills

Flexibility



Leadership



Initiative



Productivity



Social



Applied
educational systems

The learning life.

An inside look at the habits of the modern student.



The growing connection between students' lives and digital technology...

59% use a mobile phone to study

93% use study apps

67% listen to Pandora & iTunes while studying

Top Hardware: 30% use google drive

1. Laptop

2. Pen & Paper

3. Smartphone

4. Tablet

Why do we need to integrate ICTs in education?



V E R S A T I L E



PROBLEM SOLVER



R E S P O N S I B L E

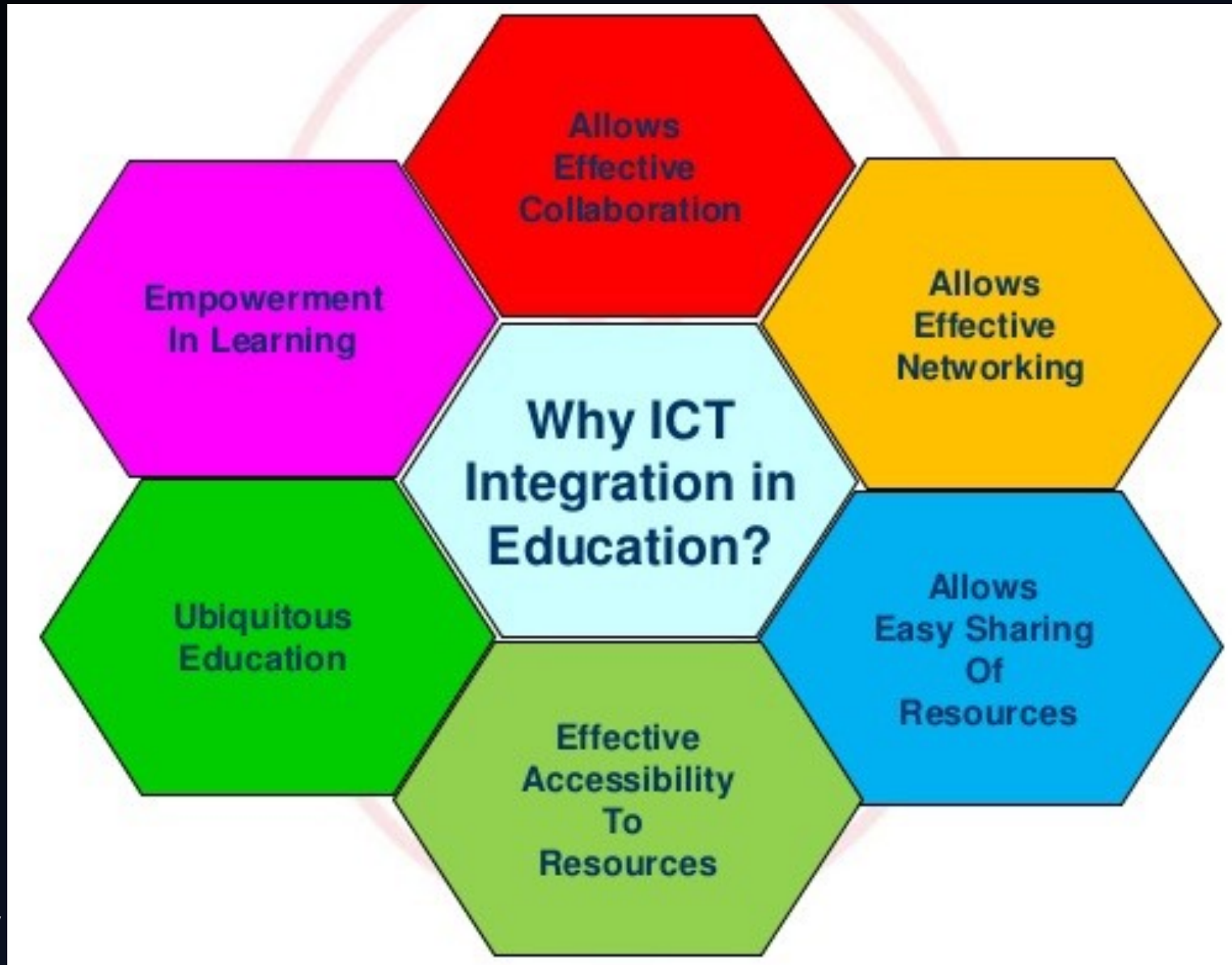
Why do we need to integrate ICTs in education?

INDEPENDENT



ENGAGED

Why do we need to integrate ICTs in education?



“Teachers need to integrate technology seamlessly into the curriculum instead of viewing it as an add-on, an afterthought, or an event.”



Heidi Hayes Jacobs

Founder and President
Curriculum Designers, Inc.

COMPONENTS OF A

21st Century Classroom

Technology is undeniably changing the face of education, and it's easy to see the impact already. Imagine what classrooms will be like in 20 years with the speed of technological innovation. Learn more about some of the key advancements in the 21st century classroom.



of teachers have computers in their classroom...



...but just **1 in 5** feel their classrooms have the right level of technology

INCREASING THE PRESENCE OF THE FOLLOWING TECHNOLOGIES COULD CHANGE THAT RATIO DRASTICALLY

Real World Education

Project-based learning (PBL) teaches concepts, but also organization, articulation, project management and collaboration



Integrating life skills into education can improve student engagement and retention and prepare them for 21st century careers



Online Courses



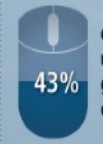
Almost a third of all college students take at least one online course

Online enrollments saw 21% growth while overall higher education student population only saw 2% growth

Over 65% of education institutions count online learning as critical for long-term educational success



Games and Gamification



of teachers have used online games in the classroom

In one study, games raised average test scores:

91.5%

With the use of digital games

79.1%

Without the use of digital games

Learning Analytics

Help teachers assess top concerns and achievements related to their students



Registration for the Learning Analytics and Knowledge conference doubled between 2011 and 2012



One system claims to predict whether a student's likelihood of sufficient course completion with about 70% accuracy, highlighting risk factors for individual students



Open Source Textbooks

In the next decade, open source textbooks are expected to grow to 25% of the textbook market



6 in 10 students have used a digital textbook - just 4 in 10 had in 2011 -

By 2013, e-textbooks may comprise



of textbook revenue

81% of teachers believe tablets enrich classroom learning

86% of students believe they study more efficiently with tablets

1 in 5 students have used a mobile app to keep their coursework organized

29% of teachers use social media for coursework, compared to now **80%** of college professors

59% of students would like to use their own mobile devices to enhance learning

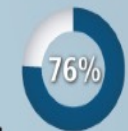
Top 3 Reasons for Teachers to Use Technology in the Classroom



Adapt to diverse learning styles



Boost student motivation



Enhance the material being taught



Over 51% of colleges cited wireless upgrades as their tech priority in 2011-12 given the **60% increase** in mobile devices on campus in the previous year

Integration of Social Networks

Engaging students with a free tool they already use can help them learn in new ways, gain focus and increase participation

A+

One social media pilot program assisted in a class' 50% rise in grades

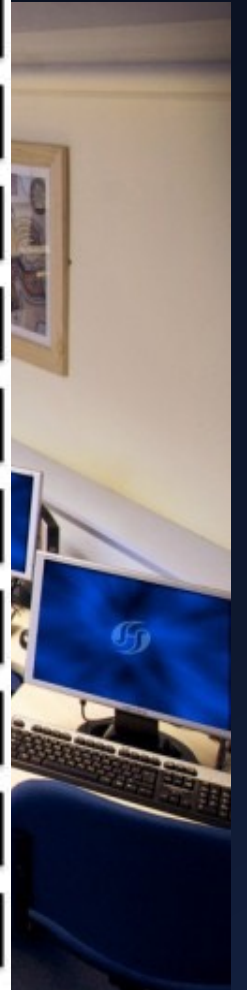
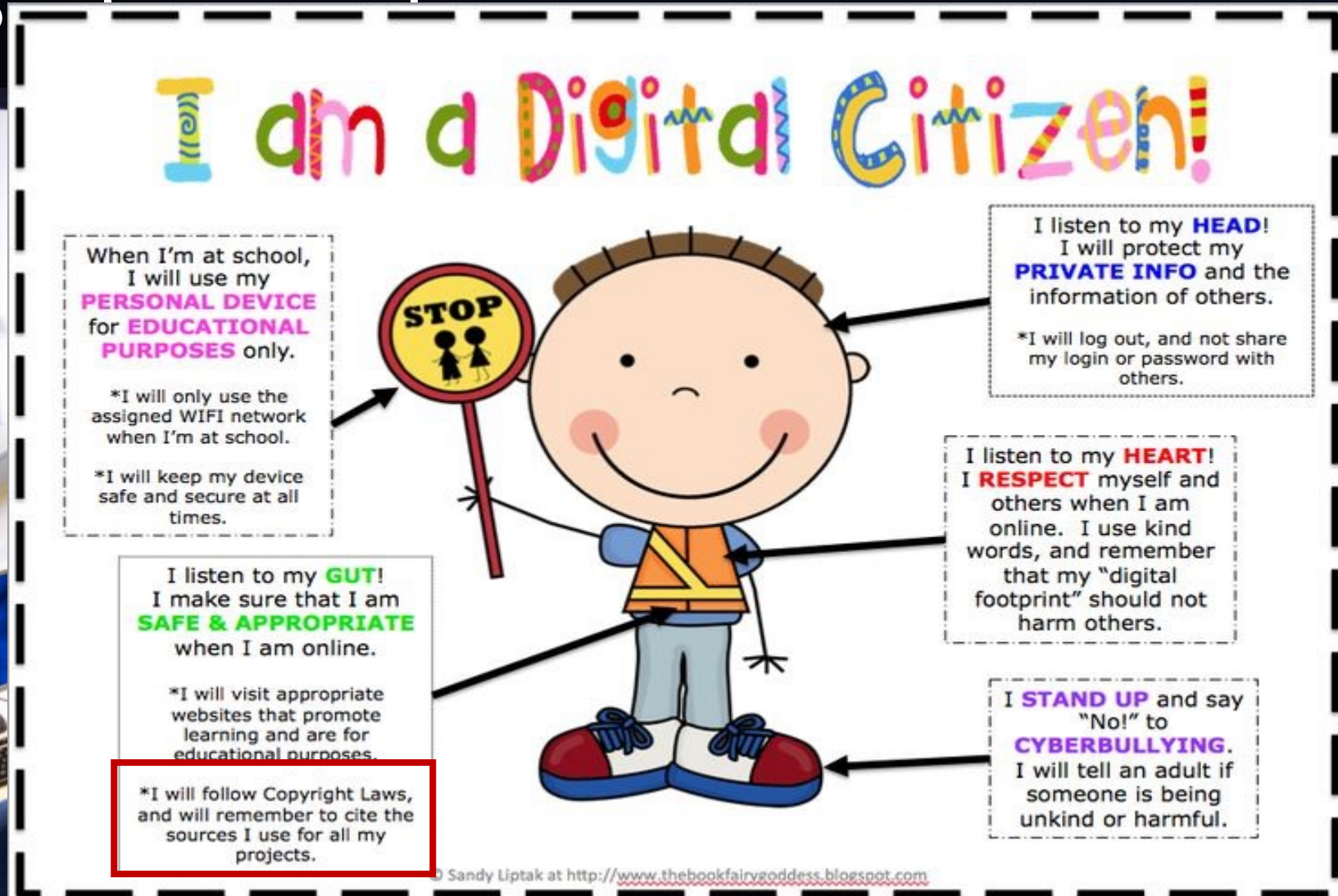


4 in 10 students believe integrating social networks into the classroom would benefit their education

Sources: <http://www.pbs.org/about/news/archive/2012/teacher-survey-fc/> • http://www.pearsoned.com/downloads/IT_Tablet_Survey_Summary_2012.pdf • <http://www.nytimes.com/2011/11/24/world/americas/schoolwork-gets-swept-up-in-rush-to-go-digital.html?pagewanted=all> • <http://techcrunch.com/2012/02/18/open-source-textbooks/> • <http://www.privet.com/releases/2011/8/openweb8708680.htm> • http://pearsonfoundation.org/downloads/IT_Tablet_Survey_Summary.pdf • <http://edtechdigest.wordpress.com/2011/10/18/trends-survey-says-wireless-networks-expand-for-mobile-growth/> • http://patrickdunn.squarespace.com/storage/MIINT_game_studies.pdf • http://loanconsortium.org/publications/survey/going_distance_2011 • <http://mashable.com/2010/09/29/social-media-in-school/> • <http://www.babsen.edu/Academics/centers/blank-center/global-research/Pages/babsen-survey-research-group.aspx> • http://www1.oncorow.org/speakup/pdfs/SU11_PersonalizedLearning_Students.pdf • <http://www.scholastic.com/browse/article.jsp?id=3751743> • http://thedailycentinel.com/news/article_db63f0c0-4c19-11e1-8269-001b71e3ce6c.html • http://www.bie.org/research/study/experimental_study_of_bie_project_based_economic_units • <http://solaresearch.org/OpenEarningAnalytics.pdf> • http://learninganalytics.net/AK_12_keynote_Siemens.pdf

How to Integrate ICT?

2. Make digital citizenship a priority
1. Start with you



How to Integrate ICT?

3. Teach mini-lessons *before* using devices



How to Integrate ICT?

4. Use the power of choice

Creativity



Practice



Discovery



How to Integrate ICT?

5. Remember to build on what you already know



How to Integrate ICT

8. Make software tools your friend



Google Classroom



Blackboard
Educate. Innovate. Everywhere.™

Having those technology...



Having those technology...

is our role in the lives of students..





**It's not information
overload. It's filter
failure.**

CLAY SHIRKEY

Clay Shirky [an American writer, consultant and teacher] is today's leading voice on the social and economic impact of internet technologies.

*Sure they know how to use
search engines...*

But who will teach
them to:

- VALIDATE INFORMATION?
- SYNTHESIZE INFORMATION?
- LEVERAGE INFORMATION?
- COMMUNICATE INFORMATION?
- COLLABORATE WITH INFORMATION?
- PROBLEM SOLVE WITH INFORMATION?



And from whom will they learn ...



Integrity





Good teachers will never become obsolete.

Students may be digital natives, but they still need help
in locating and using digital resources for learning.
Teachers may no longer be valued as content-area
experts,
but they can help students learn how to build knowledge.

The best teachers care about their students

***And that will never go out of
style.***

Thank You!

Slides available at:

<https://tinyurl.com/y9aryxnl>