THE RIGHT STUFF: MAKING TECHNOLOGY FIT

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LEARNING GOALS

- Describe various frameworks to identify suitable technology tools to achieve learning goals using pedagogical/technological approaches.

- Discover new, innovative and original ways to integrate technology into your courses in order to delivery innovative content in an online, blended, and/or face-to-face environment.
Who is are learner today?

How do they learn?

What do they need?

Where do they learn?

What do we need to do to support them?
Effective oral & written communication

Critical thinking & problem-solving

Collaboration across networks

Initiative & entrepreneurialism

Agility & adaptability

Curiosity and imagination

Changes Ahead

Grit

Hope & Optimism

HERE TO STAY!

Self-Regulation

Resilience

Skills & Attributes of Today’s Learner

Vision

Empathy & Global Stewardship
USE OF TECHNOLOGY

- Use of technology in instruction involves understanding of the interconnections between content, pedagogical, and technological knowledge.
TPACK FRAMEWORK

- Based on Lee Shulman’s
- Achieve learning goals using pedagogical/technological approaches.
- Good teaching requires an understanding of how technology relates to the pedagogy and content.
SAMR Model

Contributes to Transformational Learning

Redefinition
Tech allows for the creation of new tasks, previously inconceivable

Modification
Tech allows for significant task redesign

Augmentation
Tech acts as a direct tool substitute, with functional improvement

Substitution
Tech acts as a direct tool substitute, with no functional change

Leads to Learning Enhancement & Engagement
Redefinition
Technology allows for the creation of new tasks, previously inconceivable

Modification
Technology allows for significant project/task redesign

Augmentation
Technology acts as a direct tool substitute, with functional improvement

Substitution
Technology acts as a direct tool substitute, with no functional change

Bloom’s Revised Taxonomy

Creating Evaluating
Having students work together using interactive technology to create a solution to a problem.

Evaluating Analyzing
Having students work together using interactive technology to analyze and critique completed project.

Applying Understanding
Teaching by lecture supplemented with presentation software and classroom response system.

Understanding Remembering
Teaching by lecture supplemented with presentation software instead of projected transparencies.

Dr. Ruben Puentedura http://www.hippasus.com
QUESTIONS TO ASK

SUBSTITUTION: What will I gain by replacing the task with new tech?

AUGMENTATION: Does the tech add new features that improve the task?

MODIFICATION: Does the task significantly change with the use of tech?

REDEFINITION: Does the tech allow for creation of new task previously unconceivable?
The Learning Pyramid

Trying to learn using this often presents many 'barriers'

Effective Learning requires a great deal of this
Technology Use

- Provides virtual environments, tools, and tasks for students to engage in simulations, problem-solving, collaborations and other learning activities that require students to use higher order thinking skills.

https://visualblooms.wikispaces.com/
Tasks to engage
- Simulations
- Problem-solving
- Collaboration
- Communication

Tools
- Apps
- Devices

Virtual environments
- Learner centered

Technology is just a tool. It can be used crudely like a hammer or skillfully like a scalpel.
Curriculum drives the use of technology
Technology Implementation that Integrates Pedagogy with Technology = DEEPER LEARNING

- Technology integration
- Extend learning
- Engagement
- Adjust teaching

Click for video: https://youtu.be/us0w823KY0g  (Puenteđura 2006, 2009 & 2012)
The 4 Stages of Teacher Confidence in the Use of Technology

By Mark Anderson

1. Survival
   - I'm scared of breaking it.
   - I'm not sure what to do.
   - I think I should use this in lessons but I'm not sure how.

2. Mastery
   - I've received training.
   - I've practiced with apps.
   - I've trialled it in lessons with success.
   - I'm feeling more confident.

3. Impact
   - Students & I are using tech effectively.
   - Tech is embedded in my lessons and planning, where appropriate.

4. Innovation
   - Technology use is pervasive.
   - I am as digitally literate as I am with pedagogy and subject knowledge.
   - I innovate & share.

Increased CONFIDENCE and COMPETENCE

@ICTEvangelist

@sylviaduckworth
Before we can **understand** a concept we have to **remember** it

Before we can **apply** the concept we must **understand** it

Before we **analyze** it we must be able to **apply** it
Before we can **evaluate** its impact we must have **analyzed** it.

Before we can **create** we must have **remembered**, **understood**, **applied**, **analyzed**, and **evaluated** it.

http://edorigami.wikispaces.com/Bloom%27s+Digital+Taxonomy
WHAT DO YOU WANT TO DO WITH TECHNOLOGY?

http://www.teachingquality.org/content/blogs/bill-ferriter/technology-tool-not-learning-outcome

**Activities**
- Make a Presentation
- Start a Blog
- Create a Word Document
- Design a Flipchart
- Produce a Video
- Post to virtual Board
- Use a Whiteboard
- Develop Apps

**Outcomes**
- Raise awareness
- Start conversations
- Find Answers (to their questions)
- Be collaborative
- Change minds
- Make a difference
- Take Action
- Drive Change

Technology is a **TOOL**, **NOT** a Learning Outcome
Cool Tools
**Traditional Classroom**
- Instructor prepares material to be delivered in class.
- Students listen to lectures and other guided instruction in class and take notes.
- Homework is assigned to demonstrate understanding.

**Flipped Classroom**
- Instructor records and shares lectures outside of class.
- Students watch/listen to lectures before coming to class.
- Class time is devoted to applied learning activities and more higher-order thinking tasks.
- Students receive support from instructor and peers as needed.
WHY FLIP CONTENT?

- No longer power through PowerPoint's in class and hope they understand it.
- Multiple ways to think about a problem, instead of one.
- It allows for misconceptions to be corrected.
- More learning, active, collaborative.

Avoids passive learners.
Polling Software

https://www.polleverywhere.com/
Screen Casting Software

http://www.showme.com/
http://www.touchcast.com/
https://www.educreations.com/

White boards on iPad

Movie Maker - PC
iMovie - MAC
MAKE YOUR OWN PHOSTER

padlet
A Blank Wall to Post....

popplet
What is Popplet?
Popplet is a place for your ideas.

- Super Simple.
- Super Smart.
- Super Fun.

Share Popplets and Collaborate in Realtime.
Popplet for iOS...
People love Popplet.

Self-Grading Quiz
- immediate feedback
- use for planning and reteaching

Templates
- virtual copy machine
- provide students with starting point

Project-Based Learning
- facilitate student-driven learning experiences
- provide flexible learning paths

Assignment Tracker
- automatically organize student assignments
- clean up your inbox

Organization
- alternate organization tool for students
- makes good use of teacher-published materials

Guided Learning
- creates and publish a simple document with links to resources and video tutorials for tech support

Build Vocabulary
- use video, images and dictionary tools
- project planning

Word Posters
- created colorful poster of related words to illustrate a concept
- visualize concepts

http://linoit.com/
Swivl

http://www.swivl.com/

Using video for instruction, reflection and observation

Swivl Demo:
http://youtu.be/N6By7WwdR3U
Streaming Devices
THE CLOUD
APPLICATIONS FOR NURSES

Pubmed On Tap

Pubmed.gov

(EHR) AND (meaningful use)

Search Results (11) - Filtered by Free Full Text

Filter by Free Full Text


Assessing readiness for meeting meaningful

Tap here to search Epocrates

Medscape

Drugs
Conditions
Procedures

Interactions
Calculators
Directory

UpToDate

The Clinical Advisor
Design with the end in mind

Define learning goals
(Desired outcomes)

Decide on assessments
(Evidence of understanding)

Design instruction
(Help students achieve results)

WHERE TO GO FROM HERE:

Where the work is headed
Hook students with engaging activities (key ideas)
Explore the subject in depth (equip & experience)
Rethink with students the big ideas (research & revise)
Evaluate and develop action plans through self-assessment
"You're braver than you believe, and stronger than you seem, and smarter than you think."
- Christopher Robin

“Think about your course in terms of the assessment evidence needed to validate that the desired learning has been achieved – so that the course is not simply content to be covered or a series of learning activities” (Wiggins & McTighe, 1998, pg. 39)
Where do you start?

it's not what the software does. it's what the user does.

@hugh
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