VSTE Conference

VIRGINIA SOCIETY FOR TECHNOLOGY IN EDUCATION

February 25-27, 2007

Susan Kenney

EDIT 747- Final Project

Dr. Debra Sprague
April 30, 2007

Keynote Speaker
Marc Prensky

- School
  - Enlightenment
  - Darkening
- "Learning comes from passion!"
- Engage Me or Enrage Me

Visionary
Consultant
Author
Speaker
Inventor
Game designer
Learning designer
Futurist

Marc Prensky
www.marcprensky.com

Respect- Learning community

Teachers -- strengths
- Setting conditions,
- Providing context,
- and guiding students to content knowledge, and skills

Student – strengths
- Technology intuition
- Creativity

All Must be opened to learn from each other!

- Outlaw
- Analyze
  - Research
  - Create new and improved entries

WIKIPEDIA

Change

- "The change that is threatening to adults is invigorating to students!"   (Prensky, VSTE 2007, VSTE 2007)

Traditional	Technology
Books- 2-6 years old	Digital Text – current- some researched- some opinions
Lectures	Interaction with Experts
Class Discussions	E-chats – BLOGS - E-mail- around the world!
References	United Streaming
Black boards	Search Engines
Charts & Posters	online references
Paper, pen, pencil	Simulations
	Podcasts
	Problem based learning
	Authentic activities
	Web based projects
	WebQuests
	Interactive tools- White boards & response systems
	Graphic organizing software

What's in your IPOD?

- Frances Smith, Ed.S., CVE – Technology Coordinator

- Mona Pruett, M.S., OTR. – Program Specialist

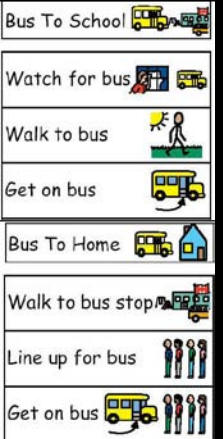## IPODs

- Students have, enjoy, & use
- Educational value?

Study

- Voice memos,
- Capacity to hold and play
  - PowerPoints,
  - podcasts,
  - text documents, and
  - audio lectures

Organization

- Calendars with alarms,
- Visual schedules, and an area for keeping
- Contact information.
- Maps can be downloaded to help students
  - find classes,
  - bus stops, or
  - other places.
- portable storage device - school related materials

Bus To School
Watch for bus
Walk to bus
Get on bus
Bus To Home
Walk to bus stop
Line up for bus
Get on bus

For Audio learners

- Library of E-text documents,
- Text documents, and
- Audio books.

For those with Autism
& similar needs

- Social stories,
- Photo schedules, and
- Visual supports

For Students with a variety of learning needs

- Multiple means to present information they have learned through
  - audio recording,
  - video recording and
  - audio/video podcasts.
  - Create artifacts for alternative assessments
    - Virginia's high stakes Virginia Alternate Assessment Program (VAAP) and
    - Virginia Grade Level Assessment (VGLA) alternatives to the Standards of Learning (SOL)Assessment.

Podcasts

- available for educational use from
  - NASA,
  - National Geographic and
  - Other groups

NATIONAL GEOGRAPHIC
Best of *National Geographic Magazine*

Opening the Door for Webquests

- By Dr. Al Durso and Ms. Bert Rakestraw
  Norfolk Technical Center, Norfolk VA

WebQuests

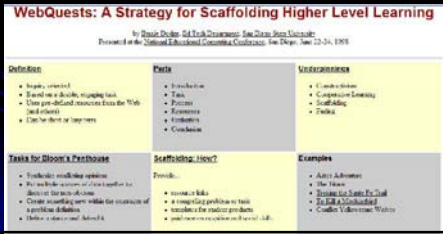## WebQuest

- Instructional activity
  - Inquiry based.
  - Cooperative Learning groups
  - Gather information from the Internet
  - Help solve a challenge
  - Realistic Tasks
  - Websites are predetermined

WebQuest

Students don't memorize facts, they
- analyze,
- synthesize, and
- evaluate information

WebQuests: A Strategy for Scaffolding Higher Level Learning

WebQuest

- Adapt
- Construct
- CD -- links
  - Instructions for building a WebQuest
  - Graphics
  - Suggestions
- A suggestion was made that older students could create WebQuests for younger students.

WebQuest

- 2 to 4 students
- Focus on a task to
- Achieve a goal
- Create an end product with the information
  - Explain what they did with the information, and
  - Why.
  - PowerPoint,
  - Radio show on tape,
  - Movie maker project,
  - Playlet,
  - Mock court,
  - Lesson plan,
  - Time line or
  - Any other creative project.

WebQuest

- Rational,
- Motivation,
- Steps, and
- Examples to encourage teachers to add WebQuests to their teacher's inventory of technological activities.

WebQuest

WebQuest Search Results

61 WebQuests found. Newest WebQuests submitted are at the top of the list. To see a WebQuest, click on its name.

Has a link gone bad? Please report it by clicking here:

Name & Description	Author(s)	Grade/Content Areas
Quilting Lesson In this unit, third grade students are combining math, social studies, and research to create a quilt that visually represents Mexico. *Submitted Mar 18, 2007*	Wendy Shoaf	Grade: K-2 English/Language Arts Math Social Studies
Biome Magazine This Webquest is designed so that students can learn collaboratively in groups about a particular Biome while incorporating math, Language Arts, history, geography, current events, and environmental science into a magazine publication. *Submitted Mar 13, 2007*	Mary Peterson	Grade: 3-5 English/Language Arts Science
The Daily Quantities In Our Lives We deal with quantities daily in our lives from the moment we wake up	Anne Le	Grade: 9-12 Math

Eric: You've Changed!

- By Paul Parron,
    - Director of the Library and Archives
    - George C Marshall Foundation and
- Susan Elkins-Mahood-
    - Instructional Technology Resource Teacher-
    - Rockbridge County Schools

ERIC

- Research though electronic databases
    - OAIster,
    - PubMed,
    - VT Electronic Theses and Dissertations,
    - Virtual Library of Virginia,
    - The World Wide Web, and
    - ERIC.

ERIC

- Procedure of locating full text
    - thesaurus and
    - glossary.
- Home page
- How to conduct a basic search in ERIC,
    - U.S. Department of Education sponsored library of educational research and information
    - Handout
        - screen shots - search procedure clear and systematic.
        - Public library card -- Find It Virginia.
        - Research on topics of interest -- help teachers find scientifically based strategies to help students.

The Brain: Making Learning Stick

- By Linda Hiller
    - Loundon County Public Schools

Crucial for Long Term Memories

adapted form Jeb Schenck, 2003
- Attention
- Emotional significance
- Working memory
- Meaning and motivation
- Long term Memory
- Assessment and retrieval

Attention

- Attracted through the senses
  - Verbal,
  - Visual, and
  - Auditory cues.
- Emotions
- Quoted Neuroscience research is validating the link between emotions and learning. Caine, Caine, McClintik, Klimek, 2005
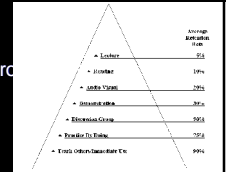
Attention

- Motivation and
- Relevance are active,.
- Working memory
  - Step towards long term memory
  - Shorter words,
  - Smaller chunks,
  - Frequent feedback and
  - Colors.

Attention

- National Training Laboratories
  - Active participation
  - Long term memory is a dynamic pro
    - Connects and
    - Consolidates information over time.
- students should be assessed
  - In ways that they were taught.
  - Many strategies shown to be effective
    - Mnemonics,
    - Visualization,
    - Chunking,
    - Repetition,
    - Songs,
    - Stories, and
    - Many others.
    - Choice is another key in learning.

Attention

- Technology can employ all those strategies so that students can learn effectively.

  "
  I ntegrate 21st Century Literacy
  M eaning, motivation, memories
  P atterning, Problem and Project-based learning
  A uthentic learning, analysis
  C hoice, create, collaborate
  T ime"   (Hiller, VSTE 2007)

5

Interactive white boards
- active learning,
- color coding, and
- engaging multimodal materials

Student response systems
- Active learning
- Immediate responses
  - Teachers give feedback and
  - Clarify misconceptions

Simulations
- A powerful way to explore,
  - Problem solve, and
  - Make abstract concepts more real.
  - Reasoning skills are strengthened
  - Students experience the effects of their decisions.

Social Tools and Collaboration

- Chats,
- Discussions, and
- Interactions with professionals in different fields.

Graphics and visuals

- Processed more quickly than text
  - Graphics,
  - Video clips in United Streaming and Safari Montague focus attention on the concepts being covered.

Authentic learning

- Students
- Remember information
- Apply it in different situations.
- Learning becomes
  - Purposeful and
  - Inspirational.

Teacher Education must:

- Inform
- Model
- Practice, and
- Encourage innovative uses of technologies
  - IPODS,
  - Webquests,
  - WIKIs,
  - Blogs,
  - Virtual manipulatives,
  - Virtual field trips,
  - Interactions with experts
  - Simulations

Teacher Education

Teacher educators must integrate the use of technology in Classes & in-service workshops- inform, share, model, and allow time for guided practice if the new technology will be integrated into K-12 classrooms. As suggested by Sprague, Cooper, and Pixley in High tech Mentoring:Evaluating the Impact of a PT3 Project.

Teacher Education

Often the message does not filter down to the teachers. Sprague, (2004) At the VSTE Conference there were very few teacher attendees. The message will only get to them if those of us who went share the information in a way that will interest them and encourage them to try some of the wonderful resources, materials, and strategies we brought back.

- This information is posted for
  - Assistive Technology Team
  - Teachers in my district.
- I will also share it personally
- I will model a less familiar technology in my workshops (for example WebQuests)

ACPS ALEXANDRIA CITY PUBLIC SCHOOLS

Think, Pair, Share

- Which technology can you envision using in your classroom?
  - How would you implement it's use?

- Which website would you like to investigate?
  - How could you use the information in your classroom?

IthinkIcan!
IthinkIcan!
IthinkIcan!
IthinkIcan!
IthinkIcan!
IthinkIcan!
IthinkIcan!
IthinkIcan!
IthinkIcan!
IknowIcan!
IthinkIcan!
IthinkIcan!
IthinkIcan!
IthinkIcan!
IthinkIcan!

Positive thinking is half the work…

Resources

IPOD Resources
- The Use of IPOD's in Education – Journal Articles
http://dirkson1.wordpress.com/journal-articles/
- The IPOD Blog
http://playlistmag.com/weblogs/ipodblog/
- Podcasting in Education
http://www.apple.com/education/solutions/podcasting/
- IPOD's at Georgia College and State University
http://ipod.gcsu.edu/
- Teach 42 – Your Guide to Educational Podcasts
http://www.teach42.com/edupodcasters/
- Apple's IPOD's in the Classroom
http://www.apple.com/education/ipod/
- Apple's IPOD's in the Classroom: Lesson Plans
http://www.apple.com/education/ipod/lessons/

- The Duke Digital Initiative
http://www.duke.edu/ddi/
- ITunes U
http://www.apple.com/education/solutions/itunes_u/
- The UK Classroom
http://mgsonline.blogs.com/mgspodcast/
- Podcasting from Your Desktop
http://odeo.com
- EDUCAUSE Learning Initiative (ELI)
http://www.educause.edu/eli
- More podcasting ideas.
http://www.teachingideas.co.uk/ict/podcasting.htm
http://www.glnd.k12.va.us/podcasts/
www.vcu.edu/ttac
www.videora.com
- WebQuest Resources
http://portaportal.com
http://webquest.org (Bernie Dodge/San Diego University)
- Kathy Schrock has an analysis guide for evaluating websites

http://school.discovery.com/
http://school.discovery.com/schrockguide/webquest/webquest.html
http://www.biopoint.com/
http://www.biopoint.com/WebQuests/webquests1999.html
http://edweb.sdsu.edu/webquest/materials.htm
http://bestwebquests.com/
l   This site helps teachers build rubrics.
http://rubistar.4teachers.org/index.php
l   This is a WIKI for many VSTE materials from VA Beach.
http://vbatvste.wikispaces.com/
l   The Best of the Best Guest Portal
http://guest.portaportal.com/vste07
l   Movie Sites
http://www.atomiclearning.com/moviemaker2
http://www.microsoft.com/windowsxp/using/moviemaker/getstarted/default.ms
px

http://www.mightycoach.com/articles/mm2/index.html
l   Book Review
http://www.kempsvillems.vbschools.com/library_Bookreview.htm
l   Poetry
http://www.poetictechnology.com/

l   Math- Geometry simulation
http://www.geom.uiuc.edu/projects/visualization/

Web-based projects
l   The journey North
http://www.learner.org/jnorth/
l   The Monster Project
http://www.monsterexchange.org/
l   The international Boiling Point Project
http://www.k12science.org/currichome.html

l   **Concept Building Simulations**
l   Boil Water simulations
http://ippex.pppl.gov/interactive/energy/boilwater.html
l   Algebra Balance Scales
http://matti.usu.edu/nlvm/nav/frames_asid_324_g_3_t_2.html?open=instructions
l   Weight, Mass, Volume, Density, Gravity- I could not access this one.
http://www.eoascientific.com/ this is the parent site I did find.
http://www.eoascientific.com/campus/science/multimedia/weight_mass/view campus/s
    interactive
l   Funderstanding Roller Coaster
http://www.funderstanding.com/K12/coaster/index.html
l   Solar System Simulation (model)
http://www.forgefx.com/casestudies/prenticehall/ph/solar_system/solarsystem.htm

l   Dinosaur Survival Game
http://www.bbc.co.uk/dinosaurs/bigalgame/index.html
l   Online Brain Resources**Online Brain Resources**
l   3-D Brain (by function)
http://www.pbs.org/wnet/brain/3d/index.html
l   The Teenage Brain
http://www.pbs.org/wgbh/pages/frontline/shows/teenbrain/
l   The Adult BrainThe Adult Brain
http://www.pbs.org/wnet/brain/episode4/
l   Neurosciences for kids
http://faculty.washington.edu/chudler/neurok.html
l   NIHNIHrain BasicsBrain Basics
http://www.ninds.nih.gov/disorders/brain_basics/know_your_brain.htm#making
l   Howard Hughes Medical Institute—Seeing, Hearing, and Smelling the WorldSeeir
http://www.hhmi.org/senses/
l   ASCDASCDrain and LearningThe brain and Learning
http://www.ascd.org/portal/site/ascd/menuitem.5433809e77a3c59bbfb3ffdb62108a0
    c/
l   Journal of Cognitive SciencesJournal of Cognitive Sciences
http://www-mitpress.mit.edu/catalog/item/default.asp?sid=2BD99E49-3C02-48F1-
    AE6B-6E16F6F6FB97&ttype=4&tid=12
l   WebQuests created for students who are Deaf and/or Blind
http://www.uen.org/utahlink/activities/view_activity.cgi?activity_id=8224
l   From: Linda Hiller's The Brain: Making Learning Stick
l   Schenck ,Jeb .Learning, Teaching, and the Brain .Knowa Inc.2003.

Time to EXPLORE!