

Natural Disaster Relief Occupations

“E- Learning”



What do Natural Disasters have to do with Careers and Technology?

YOU CAN . . .

- Challenge students through critical thinking and problem solving
- Develop career preparation
- Offer real social issues using a creative delivery method



Make the Connection

- Technology based instruction can be active learning
- Based in theoretical foundations
- Create excitement with unique delivery
- Students identify with real social issues

The Problem . . .

- **Collaboration with Occupational Course**
 - Problem
 - Students lack of enthusiasm and interest
 - Course design needed to be change
- **Redesign course**
 - Introduce Experiential theory, trunk concept, natural disaster
 - Trunk assignment
 - Pre/Posttest to evaluate learning

Rationale . . .

- **Theories:**

- Constructivism

- *Settings replicate real life in order to identify the issue* (Williams, 1999). *Develop critical thinkers and problem solvers*

- Experiential Learning

- *“Education that occurs as a direct participant in the events of life.”* Ricketts & Willis (2002).
 - *“Learning by doing”* (Barrick, 1989).

Biological Science Curriculum Study (BSCS) Based
“5E” Instructional model

Rationale continued . . .

- “Natural Disaster” topic to organize curriculum
 - Topic selected because of tie to mission of FCS
 - need for curriculum and training
 - real social issue
 - Assignment was to develop career preparation lessons using topic
- Trunk Delivery Concept
 - Prepackaged educational resource which moves
 - Hands-on interactive learning
 - Interdisciplinary

Trunk Concept . . .



- A portable prepackaged educational tool
- Integrates teaching standards
- Incorporates learning theories
- Interdisciplinary
- Benefits from Literature Review
 - Active, self-directed student learning, positive attitudes, increased attendance
 - Prepackaged, low cost, no storage

The Study

- Purpose of Study
 - Understand most effective structure for teaching an FCS occupational course to college students
- Design of Study
 - Population: teacher candidates who developed lessons in Occupation course
 - Implement in classrooms
- Methods
 - Pre/Posttest, Interview

The Class . . . Tools for Success

Introduced broad concepts and framework

Natural disasters

Theoretical foundations

Technology applications:

web quests & podcasts

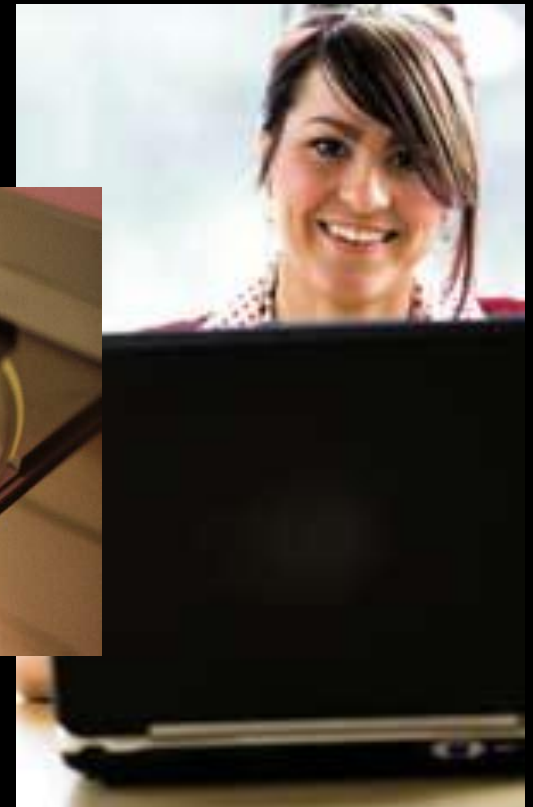
Delivery concept

Explained the assignment



Example of Students Work

- Food Production Management Services
 - Web quest and Podcast
 - Notebooks
 - Visuals in Trunk



Problems Encountered

- Students struggled with relevant and appropriate content to utilize in application of technology.
- Combination of course framework, components and independent learning was overwhelming.
Students reverted to rote learning.



Lessons Learned

- Students have skills to use technology, but struggle with selection of applications.
- Students need further understanding and practice to apply critical thinking skills
- Web quests helped control information overload
- Student do revert to rote learning when challenged

What you can do

- Teach about careers
- Use a social issue to frame instruction
- Include active learning
- Use technology to guide and build learning experiences
- Innovative delivery creates excitement such as Trunk

*We started a fire . . .
Its spreading!*



Resources

- Glossary of Instructional Strategies
<http://glossary.plasmalink.com/glossary.html>
- Ready.Gov
<http://www.ready.gov/america/about/instructional.html>
- Red Cross Organization
http://www.redcross.org/services/disaster/0,1082,0_319
- Ricketts, M., & Willis, J. (2002). *The power of experiential learning*, <http://www.teambuildingguru.com>
- Adams, L., (2006). Hurricanes and natural disasters: A call to action for fcs. *The Journal of Family and Consumer Science*, 98(1), 8-11.
- How to create a podcast
<http://learninginhand.com/podcasting/>

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