PAIRING TECHNOLOGY

With Research-Based Pedagogy and Effective Comprehension Strategies

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PERSONAL CONTEXT

Education Studies:

- Advancing technological skills began with Dr. Fogleman in Fall 2011.
- Creating a digital learning environment began with Dr. Kern in helping plan the Honors Colloquium on Public Education in Spring 2012-Fall 2013.
- Pursued growth opportunities through independent studies within the School of Education in Fall 2013-Fall 2014.
- Theory into practice during pre-student teaching and student teaching experiences.
- Dual roles: the student completing the project and the student teacher using the project in practice.
“We are living in an age where technology is changing the educational landscape. As such, it is incumbent on us (educators) to embrace these advances, maximize their potential, and better teach our students... We also need to recognize that changing classroom practice does not mean throwing out everything we have done before—rather, we need ways to connect tried and true pedagogical practices with the benefits of these new technologies” (Besnoy and Clarke).

— From “Connecting the Old to the New: What Technology Crazed Adolescents tell us about Teaching Content Area Literacy” (2010).
WHAT’S THE PROBLEM?

❖ Students and teachers have been thrown into a digital learning environment without first receiving training on how to purposefully use their technology.

❖ With the increase of technology use in schools, students and teachers are concerned about how and if technology enhances learning or if it provides a means of distraction.

❖ The Great Experiment: Student Teaching.
RESEARCH BASED PRACTICES

- Bloom’s Taxonomy
  - Classification system used to distinguish different levels of human cognition (Bloom).
- SAMR Model
  - Framework to access and evaluate technology use in the classroom (Puantedura).
- 7 Effective Comprehension Strategies
  - Keys to comprehension (Zimmerman and Hutchins).

7 Comprehension Strategies
- Activating prior knowledge
- Questioning the text
- Drawing inferences
- Determining importance
- Creating mental images
- Repairing understanding when meaning breaks down
- Synthesizing information
METACOGNITION

- Dove into analyzing the connections between “tried and true pedagogical practices” (Bloom’s Taxonomy) and the “benefits of the new technologies” (SAMR Model).
  - “I need more practice opportunities to feel more confident.”

- Continued to build personal knowledge base about Bloom’s Taxonomy, SAMR Model, and the 7 Comprehension Strategies.
  - “...Provide meaningful professional development to assist teachers in incorporating these technologies into classrooms with purpose.”
Metacognition led to metacomprehension or the “awareness of and conscious control over one’s own understanding or lack of it” (Standiford).

As a teacher, improving my understanding allowed me to:

- Create purposeful, engaging, and digital lessons and units.
- Develop my own digital literacy skills.
- Build a positive, supportive digital learning environment.

My students were able to:

- Disengage from distractions and use technology purposefully.
- Sophistically communicate ideas in mediums previously inconceivable.
- Engage in higher level thinking by creating and publishing digital content.
STUDENT CREATION

http://thelightwecantsee.tumblr.com
BLOOM'S

Educator designs a task that has a significant impact on student outcomes

SAMR

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

Developed by Kathy Schrock
November 2013

Inspired by the work of Andrew Churches and Loui Lord Nelson
7 Effective Comprehension Strategies
HUNGRY FOR MORE?

Explore a more in-depth look at:
- The relationship between Bloom’s taxonomy, SAMR model, and the 7 Effective Comprehension Strategies.
- Results and analysis of the student and teacher surveys.
- Index of technology resources for both students and teachers.
- To be published on Digital Commons.
QUESTIONS?