Re-purposing Technology Lesson Plan
TE 831: Teaching School Subject Matter with Technology

Summary Box

Lesson title: Virtual Field Trip to the Australia Zoo

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Subject area: Science and Social Studies

Technology used: Virtual Field Trips

Length of lesson: 60 minutes

Suggested grade level: K-2nd

Lesson Objectives:

The student will be able to:

- *explore Australian animals and their habitats both independently and collectively.*
- *recognize that maps and globes represent places.*

Student NETS Standards Alignment:

3. Research and Information Fluency
Students apply digital tools to gather, evaluate, and use information.
b. locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.

Materials:

1. Computer lab (1 computer per student)
2. Student Zoo Links (pre-made Word document on school shared drive):
http://kids.sandiegozoo.org/
http://kids.discovery.com/games/animal/australia-zoo
http://www.mnzoo.org/education/education_games.asp
3. Teacher computer
4. Projector
5. Globe
6. Teacher created Australia Virtual Field Trip:
https://www.youtube.com/watch?v=mlDXZywedvc
https://maps.google.com/maps?client=safari&q=map+pf+australia&oe=UTF-8&ie=UTF-8&hl=en#
https://sites.google.com/site/virtualfieldtripaustraliazoo/
7. Paper
8. Pencils and crayons

Lesson Procedure:
Before (30 minutes)

The first part of this lesson requires a Word document with the following websites:
http://kids.sandiegozoo.org/
http://kids.discovery.com/games/animal/australia-zoo
http://www.mnzoo.org/education/education_games.asp

Save the Word document on the schools "shared" drive that is accessible on student computers.

Gather the kids to the whole group instructional space and using a projector, pull up the previously saved Word document with the student websites. Explain to the students that they will be going on a zoo exploration today. The students will be able to explore any or all of the three websites on the list. The students access the links by clicking on the link with their mouse. Demonstrate how to do this. Clicking on one of the links, show students the "right" thing to do by clicking on appropriate headings, watching entire videos, not clicking ads on the top or side of the page, etc. Also, show the "wrong" thing to do by clicking the mouse repeatedly, playing around with the scroll bar, watching only seconds of a video, etc.

Bring the students to the computer lab and log-in each student. Access the word document on the shared drive and open it for each student. Remind students of their assignment expectations (stay on task, watch the entire video, don't click on ads) and tell them that they will have 20 minutes to explore the zoo animal websites on their own.

During (20 minutes)

When the time in the computer lab is complete for the student independent exploration, bring the kids back to the classroom. Have the students gather in the large group instruction space and hook up the computer to the projector. Begin the discussion by outlining how the class will be taking a virtual field trip to Australia. Explain that a virtual field trip is needed because we do not have time to travel all the way to Australia and also cannot afford the cost of the trip. Display the globe and show where the Unite States is, and then point out Australia and discuss the difference between them. Have the students brainstorm the best way to get from the US to Australia (airplane).
Open the Word Document that has the following websites ready for teacher use:
https://sites.google.com/site/virtualfieldtripaustraliazoo/
https://maps.google.com/maps?client=safari&q=map+pf+australia&oe=UTF-8&ie=UTF-8&hl=en#
https://www.youtube.com/watch?v=mlDXZywedvc

Click on the first website:
https://sites.google.com/site/virtualfieldtripaustraliazoo/
The first video on the site features a plane that is taking off. Explain to the students that they will be the pilots for this trip to Australia and have them simulate flying a plane as the Youtube video plays. After "landing" the plane in Australia, click on the website:
https://maps.google.com/maps?client=safari&q=map+pf+australia&oe=UTF-8&ie=UTF-8&hl=en# and show the students the flight path of how far you've traveled on a flat map.

Now that you are in Australia, you will meet Steve Irwin, who will greet you at the Australia Zoo. Click on the link:
https://www.youtube.com/watch?v=mlDXZywedvc
Discuss how some animals that they saw on the websites may be found in Australia zoo, while others may not. Select the second link on the page: https://sites.google.com/site/virtualfieldtripaustraliazoo/ to visit the Australia zoo. Use the "Animals" heading to access available content on animals. Ask the students what animals they are interested and which they would like to explore. This will allow them some responsibility in guiding their learning. Read the information on the website for the students while they view the images. Also check out the Youtube videos under the "Animal Diaries" section to see additional multimedia footage.

After exploring the animals, use the "Landing" video on https://sites.google.com/site/virtualfieldtripaustraliazoo/ to fly back to the United States. This gives the kids another chance to "fly" the plane as they land back in the US.

After (10 minutes)

Send the students back to their seats and pass out a piece of paper to each student. Instruct the students that they will now think of their favorite animal that they saw at the Australia zoo and draw a picture of it. When they are done drawing, they will then write 1-2 sentences about that animal. Circulate around the room while the students work and assist with this assignment as needed.

Reflection

The technology that I chose to incorporate into this lesson was a virtual field trip. Upon reviewing articles to post and summarize this week, it had become evident to me that a virtual field trip was a practical tool that I could incorporate

into my classroom. Our school does not have a lot of tech tools (no smartboards, iPads, etc), but we do have computers! Another reason that I chose a virtual field trip is because my students do not have much knowledge about operating a desktop computer on their own, and need to be instructed each step of the way. Since virtual field trips can be teacher created and/or teacher led, it allowed me to create my own field trip and save it onto the "shared" drive on our school computer system. While bringing my students up to the computer lab, I knew that they would be accessing sites that were approved and were age appropriate for them.

The latter portion consisted of a teacher led trip where I was able to read and elaborate on the ideas for the students. The virtual field trip I created was about the Australia Zoo. We have been learning about Australia in Paragon (Mosaica Inc. Social Studies), and about animals in science. This field trip combines both areas as we explore the geography and animal life of Australia.

The three domains (Technology, Pedagogy, and Content Knowledge) of the TPACK model were use when designing and implementing this project. The student Technology used was a desktop computer in a familiar setting. My class has been using the computer lab for almost 10 months now, and has learned how to use a mouse, open a web browser, and click on tabs to access material on a webpage. Our school has a "student" drive on our computer system, so that I am able to save documents onto the drive that can be accessed by all students.

The Content Knowledge for this project encompassed both the student knowledge about Australia and animals, and also their content knowledge of operating desktop computers. The student websites were all teacher selected and

compiled so that the students could simply click on the link, instead of having to type the hyperlink in the address bar. Typing and keyboard use is an unfamiliar skill for my Kindergarten students, and had to be considered when designing this project. The websites that I selected for the project also included audio in order to minimize the amount of reading. My students can read basic sentences, but still rely on sounding out the individual sounds in words. Large amounts of type on the websites would have upset some of my students.

My teaching Pedagogy is inspired by "inquiry-based learning." I believe this type of learning allows students to explore concepts and ideas and form their own conclusions about the topic, before explicit instruction begins. This type of pedagogy is apparent in the beginning activity for the lesson, as the students are free to explore the animal websites on their own.

My Kindergarten students loved taking part in this virtual field trip to the Australia zoo. Every time we go to the computer lab, they are accessing the same computer-learning program (Compass Odyssey). The kids were so excited to have the chance to explore animals on their own. The students all have their own headphones, so they were free to explore without bothering others around them.

The teacher led virtual field trip also got rave reviews while we were "flying planes" over to Australia. It allowed me to incorporate map and geography skills into my lesson while talking about traveling to another country and the best way to get there. We watched video simulations of a plane taking off and landing, while the students were pilots. It was interesting to realize that very few of my kids had ever been on a plane before, so this was their first "introduction" to

flying. Both the kids and I were amazed to learn about the different breeds of animals in Australia, and also how old some of the animals are.

While this field trip had many appealing factors, there were some constraints as well. Since my students are in Kindergarten and do not have much computer knowledge, the students would frequently need help navigating through the websites they explored independently. Countless error messages and "right click menus" were displayed that required teacher assistance to solve. Some students also spent their independent time staring at their friend's computer and trying to get on the same video they were, This took resulted in a loss of time for the student trying to navigate through the website.

Virtual field trips can really be used in any classroom with each content area. The definition of a "virtual field trip" is very broad and allows room for interpretation and implementation. Kirchen explains, "A virtual field trip (VFT) is a technology-based experience that allows children to an educational journey without leaving the classroom (Cox & Su 2004). These multimedia presentations bring the sight, sounds, and descriptions of distant places to learners (Klemm & Tuthill 2003). Virtual field trips vary in complexity. They can range from a single PowerPoint or video presentations to a multifaceted virtual experience integrating photos, videos, text, audio, video conferencing, and internet resources (Kirchen 2011)."

One unique benefit of virtual field trips is that they can be interactive and conducted in real time. Presenters from across the globe are able to talk to your class about their area of specialty (museums, geology, zoology, etc.). The virtual field trips turn into an interactive presentation and the students are able to have

some control over what direction the virtual field trip takes based on their questions and interests (Zanetis, 2010).

This technology aided my teaching practices by allowing me to investigate and plan an activity that is catered to my students knowledge and content areas. Many of the videos or presentations that I find online contain bits and pieces of relevant information for what my students are studying, but they also include a lot of content that is not. I found that allowing the students to state their input on which Australian animals to explore also kept them very engaged. Many of the students chose animals that they had explored earlier in the computer lab. It afforded me the opportunity to keep the instruction interesting and intriguing to them. Seeing how excited my students got to first explore on their own and then as a class has inspired me to incorporate more of these field trips next year and for my future classes. It is a valuable way to allow student exploration (that is teacher approved) and to help them shape and guide their own learning.

Works Cited

Kirchen, D. J. (2011). Making and taking virtual field trips in pre-k and the primary grades. //NAEYC Young Children//, //66//(6), 22-26.

Zanetis, J. (2010). the beginner's guide to interactive virtual field trips. //Learning & Leading with Technology//, //37//(6), 20-23.