

Worlds Converge

Fusing Library and Technology in the Classroom

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Introductions

www.sidwell.edu



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Teaches PK-4th



Now a little about you:

- What is your role in your school/district?
 1. Administrator
 2. Librarian
 3. Tech
Coordinator/Integrator
 4. Classroom Teacher
 5. Curriculum Specialist
 6. Other



How many times a year do a Librarian and Tech teacher teach classes together?

1. Every week
2. A few of times per term
3. One time a year
4. Only on days that don't end in "y"



Resources

- Link off the ISTE site, or type in this URL:
- <http://sfsanimalresearch.pbworks.com/ISTE-Model-Lesson>



Goals and Objectives

- Research Process
 - Integrate information literacy skills
 - Learn to evaluate quality:
 - Print materials
 - Online resources
 - Use a consistent research model
 - Develop good habits for:
 - Reading for information
 - Note-taking
 - Citing sources



Information Literacy Skills:

- Learn to select key words
 - Use them to search in online library resources (Ctrl-F) or in custom search engines
- Learn to read for information online
 - Practice reading for information on a website
- Select or create images and music legally
 - No downloading without permission



Research Lesson – 4th Grade

- Librarian and Tech Integrator have back-to-back classes and teach together in each other's rooms or the fourth grade classrooms.
- Teachers are present for the lessons once research has started.



Is your Librarian a (purple) dinosaur?

- Yes
- No



Who decides about class scheduling in your school?

1. Everyone has a voice
2. The Technology specialist
3. The building administrator
4. The School Nurse
5. The School Secretary
6. None of the above



First meeting in the Library

- Begin with first chapter of ***Did Fleming rescue Churchill? : a research puzzle***, by James Cross Giblin ; illustrated by Erik Brooks
- Revisit the story as we move through the process.



Research in Eight Steps

- Introduce [research model](#)
- Compare the steps to the process the boy goes through in the story.



Question:

At what age is research formally introduced in your school?

1. PK – (Our kids are so advanced!)
2. Kindergarten-First Grade
3. 2nd Grade- 3rd Grade
4. 4th Grade
5. Not until Middle School



Evaluation of Materials

- Role of Encyclopedias
- Assess print materials based on reading level, copyright date, author/source
- Assess websites based on reading level, last update, author/source



The New Literacy

- Assess websites for validity:
- Bogus Website:
<http://zapatopi.net/treeoctopus/>
- Winston Churchill Biography:
<http://www.winstonchurchill.org/>
- Alexander Fleming Biography:
<http://www.pbs.org/wgbh/asof/databank/entries/bmflem.html>



Does anyone at your school formally teach online reading skills?

- Yes
- No



Learning to read online

- Information is only available by READING.
- Use CTRL-F to search for information using a key word.
- Read full paragraphs instead of “grab and go” approach.
- Read captions and side notes.



Evaluate Materials- Print and Online

- Teachers should always evaluate available resources BEFORE selecting research topics!
- Author
- Copyright date
- Reading Level
- Table of Contents and Index
- Captions and author's notes.
- Usability



Partner Research – Giant Pandas

- Topic chosen by teachers to relate to Social Studies
- Brainstorm:
 - What we know
 - What we wonder about
- Assign topics to student partners



Introduce Materials

- Introduce books (pre-selected at reading level)
- Make a large number of books available
- Create a custom search engine on Google, or upload a list (pre-selected) websites linked from accessible webpage.



Key Words

- Brainstorm key words list
- Practice refining terms
- Relate key words to
 - Indexes and Tables of Contents
 - Search engine searches
- Teach using key words on websites using CTRL-F to search site



Note-taking Skills

- Set up note pages or cards with source at top of page.
- Respect the author's voice and hard work.
- Paraphrase information
- Avoid complete sentences



Writing from your notes

- Establish your voice as the writer.
- Organize notes according to the order you wish to present the information. (Or create an outline)
- Compose a WOW and a MOM paragraph.



Create Illustrations and Captions

- Use drawing program to create illustrations that fill in the gaps of what you have written.
- No image searches – make it yourself!
- Devise appropriate captions to explain them.



Post projects on a shared site

- We use a wiki:
- <http://sfsanimalresearch.pbworks.com/Giant-Pandas-by-Grade-4>
- Create accounts so students can comment on each other's work.



Questions?





Thank You!



Visit booth 1626 for more information



Cephalopod News

2010-05-07 **Monster Colossal Squid Is Slow Not Fearsome Predator** (BBC)

The world's largest invertebrate is not a fast and voracious predator as previously thought, say scientists. The researchers' calculations reveal the colossal squid survives on only a small amount of prey.

12/18-05-06 **Baby Cuttlefish**

Born Afterquay

Help Save The **ENDANGERED** PACIFIC NORTHWEST TREE OCTOPUS From **EXTINCTION!**

[Information](#)[FAQs](#)[Sightings](#)[Media](#)[Activities](#)

About The Pacific Northwest Tree Octopus

The Pacific Northwest tree octopus (*Octopus paxarbolis*) can be found in the **temperate rainforests** of the Olympic Peninsula on the west coast of North America. Their habitat lies on the Eastern side of the Olympic mountain range, adjacent to Hood Canal. These solitary cephalopods reach an average size (measured from arm-tip to mantle-tip,) of 30-33 cm. Unlike most other cephalopods, tree octopuses are amphibious, spending only their early life and the period of their mating season in their ancestral aquatic environment. Because of the moistness of the rainforests and specialized skin adaptations, they are able to keep from becoming desiccated for prolonged periods of time, but given the chance they would prefer resting in pooled water.

An intelligent and inquisitive being (it has the largest brain-to-body ratio for any mollusk), the tree octopus explores its arboreal world by both touch and sight. Adaptations its ancestors originally evolved in the three dimensional environment of the sea have been put to good use in the spatially complex maze of the **coniferous Olympic rainforests**. The challenges and richness of this environment (and the intimate way in which it interacts with it,) may account for the tree octopus's advanced behavioral development. (Some evolutionary theorists suppose that "arboreal adaptation" is what laid the



Rare photo of the elusive tree octopus

<http://zapatopi.net/treeoctopus/>



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To V-E Crowds
Churchill waves to
crowds in Whitehall



**Road to Victory:
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Churchill and
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“WE MUST BEWARE OF NEEDLESS INNOVATION, ESPECIALLY WHEN GUIDED BY
LOGIC.”

<http://www.winstonchurchill.org/>

PEOPLE AND DISCOVERIES



Alexander Fleming
1881 - 1955

Alexander Fleming was born in a remote, rural part of Scotland. The seventh of eight siblings and half-siblings, his family worked an 800-acre farm a mile from the nearest house. The Fleming children spent much of their time ranging through the streams, valleys, and moors of the countryside. "We unconsciously learned a great deal from nature," said Fleming.

When their father died, Fleming's eldest brother inherited the running of the farm. Another brother Tom had studied medicine and was opening a practice in London. Soon, four Fleming brothers and a sister were living together in London. Alec, as he was called, had moved to London when he was about 14, and went to the Polytechnic School in Regent Street. Tom encouraged him to enter business. After completing school he was employed by a shipping firm, though he didn't much like it. In 1900, when the Boer War broke out between the United Kingdom and its colonies in southern Africa, Alec and two brothers joined a Scottish regiment. This turned out to be as much a sporting club as anything; they honed their shooting, swimming, and even water polo skills, but never went to the Transvaal. Soon after this, the Flemings' uncle died and left them each 250 pounds. Tom's medical practice was now thriving and he encouraged Alec to put his legacy toward the study of medicine.

Fleming took top scores in the qualifying examinations, and had his choice of medical schools. He lived equally close to three different schools, and knowing little about them, chose St. Mary's because he had played water polo against them. In 1905 he found himself specializing as a surgeon for almost as random a reason. His switch to bacteriology was even more surprising: if he took a position as a surgeon, he would have to leave St. Mary's. The captain of St. Mary's rifle club knew that and was desperate to improve his team. Knowing that Fleming was a great shot he did all he could to keep him at St. Mary's. He worked in the Inoculation Service and he convinced Fleming to join his department in order to work with its brilliant director -- and to join the rifle club. Fleming would stay at St. Mary's for the rest of his career.

In 1909 German chemist-physician [Paul Ehrlich](#) developed a chemical treatment for syphilis. He had tried hundreds of compounds, and the six hundred and sixth worked. It was named salvarsan (meaning "that which saves by arsenic"). The only previous treatments for this disease had been so toxic as to often kill the patient. Ehrlich brought news of his treatment to London, where Fleming became one very few physicians to administer salvarsan. He did so with the new and difficult technique of intravenous injection. He soon developed such a busy practice he got the nickname "Private 606."

When World War I broke out, most of the staff of the bacteriology lab went to France to set up a battlefield hospital lab. Here they encountered infections so drastic that soldiers quickly died from them. Yet they were still simple infections. Fleming felt there must be something, a chemical like salvarsan, that could help fight microbe infection even in wounds caused by exploding shells. During the course of the war, Fleming made many innovations in treatment of the wounded, but this was soon overshadowed by the work he did afterwards.

<http://www.pbs.org/wgbh/aso/databank/entries/bmflem.html>



Research in 8 Steps

1. Select a general topic
2. Presearch
3. Focus the topic
4. Find Sources
5. Record your sources
6. Outline and take notes
7. Write the paper or create the project
8. Edit/rewrite