

LESSON: Researchers use multiple sources to gather information- Source Hunt Grades K-4

The Big Idea:

-Students will discover that there are many ways to gather information about a topic.

Students need to think about a wide variety of formats in their search for information. “Different formats provide different ways of knowing and accommodate different learning styles.” *Guided Inquiry- Learning in the 21st Century*, Kulthau, Maniotes, Caspari

Part 1:

- Provide pairs of students with a clipboard, pencil and a piece of paper.
- Ask students what they would do first to find out information about the research topic. Almost always, students, even Kindergarteners, will say the computer (Internet) or books (reading).
- Tell students that researchers use many other ways to find out information. The place where you get that information is called a SOURCE.
- Tell students they will be going on a source hunt in their classroom and the school. Pairs of students will walk around the class and then the school and list all the ways they can find information ABOUT ANY TOPIC.
- Model this in the classroom. For example, take your clipboard, walk around and notice the weather chart. Talk about how that chart provides weather information. List the weather chat in your piece of paper. Model 2 or 3 sources and list them on your chart.
- Allow the pairs to roam around the class and list other sources of information like: Charts and tables, photographs, word walls, magazines, maps, globes, graphs, poems, posters, signs, clocks, lists etc.
- Have the pairs explore a hallway or part of the school building for additional means of gathering information. EMPHASIZE that they should look for student projects and displays around the school.
- Share the students’ ideas. Chart.
- Ask the class again how people find out information on a topic. Discuss the many sources available to the students to use during their research.

Part 2:

- Discuss the purpose of each source/display/project.
- Ask the class what information was learned from the source.

Part 3:

**** Tips on finding resources appropriate for K-2**

- Art work
- Listen to computer sites
- Movies
- Interviews
- Field trips
- Music
- Poetry
- Dance
- Leveled books
- Websites
- Role play

Do (Middle)

In the middle, students DO the research.

- **Read informational text in books and websites, interview experts, view, tell, touch artifacts, listen, visit a site, etc. to acquire information.**
- **Take notes with words or pictures**
- **Cite sources**
- **Reflect**

Big6 Steps:
Location and Access
Use of Information

LESSON: What is the Internet?
Grades K-2

The Big Idea:

-The Internet is another place to find information

First assess what children know.

- Brainstorm a definition of the following terms to assess what kids know about:
 - Internet
 - Computers
 - Websites

Help students define terms.

- Define the Internet using as many ideas as possible from the children. Tell the children the **Internet is a network, like a spider web, connecting millions of computers. The computers share information.**
- Define a website as **a specific place on the computer that gives you certain information.**

Explore the different kinds of information found in websites.

- Using a Foss website, show the children the different kinds of information that can be found on a website. These websites are for young children and contain pictures, movies, audio, text information, and interactive activities.
- Go to Foss site: <http://www.fossweb.com/modulesK-2/>
- The site will show a menu of icons for the different modules (topics.) Choose a topic of interest to show the children. For ex: In K you can choose fabric or wood and paper to tie into the curriculum. Once you click on a module, explore both the horizontal and vertical menus. Ask the children to predict what each button reveals.
- Show the different types of info one can extract from the website-ALL THE FOSS SITES ARE ORGANIZED SIMILARLY.
- Click on **Media**.
Ask the children to predict what each picture stands for.
- Continue to show the children each icon and discuss the different types of information provided.

LESSON: Informational Text Features

Grades 1-4

The Big Idea:

-Books and Websites have certain features that help the reader make sense of the text.

Ask the class:

- What is informational text?
- How is it different from fictional text?
- Where do we find informational text?

Discuss:

- **Informational text** (what we read to learn information, pursue your interests and questions) has many **FEATURES** (parts) that are designed to help readers **navigate** (find his/her way through) the resource and make the information friendly to the reader.
- When a reader expects these features and knows how to use them, he/she can move in and out of the text. You can select the pages/sections you need for your topic, connect your topic with pictures, explore captions, diagrams, learn about the author...and so much more!
- Both informational books and websites have an organization and have specific features that help the reader navigate (find your way through) the information.
- Probably more familiar with the organization of an informational book than a website because although we use websites a lot, we don't really spend a lot of time thinking about the features (parts) of the site that can help us find info.

Ask:

- What are some features (parts) of **INFORMATIONAL TEXT** that can help the reader navigate (find his/her way) through the text?
- Show a book to help trigger some ideas.
- Turn and talk

Students ideas should come up with are...

- Title
- Contents
- Glossary
- Bold

Ask:

- Why are these parts (features) important to the reader?
- How do they help the reader when the reader is looking at the information?

Ask:

- What are some features (parts) of informational text **FROM A WEBSITE** that can help the reader navigate (find his/her way) through the text?
- Show a site to help trigger some ideas.
- Turn and talk

(The students may not know the exact name of the feature. That is Ok, just have them describe the feature.)

Students should come up with...

- Title
- Links
- Menu
- Pictures

Ask:

- Why are these parts (features) important to the reader?
- How do they help the reader when the reader is looking at the information?
- Tell the class that today they are going to look at books and websites to search for the features of each and when they are done they will compare the features of books to websites.
- This can be done in a few lessons whole class focusing on books for a day or two, and then websites. With older students you can split the class in half. Half the class will review informational books to discover its features, half the class will look at a website www.history.org.
- On the organizer, students list each feature they find and the page it is on.
- If the class is split, on the next day switch groups and the books reviewers will look at the website and the website reviewers will look at the books.
- Students will then compare the features of a book to the features of a website.
- Students will formulate conclusions based on their observations

Example chart for teachers:

Books

Feature	Purpose	Organization
Acknowledgements	Thanking people who helped the author and illustrator	Usually in a paragraph in the beginning or the end.
Bibliography	Lists the sources the author used to collect his/her information	Alphabetical, by source author's last name
Blurb/Summary	Gives a short synopsis	Usually on the back cover or front flap. Could be in a box
Books by this author	Lists more of the author's written work	Alphabetical or in the order that they were written.
Captions	Writing that gives more information about a photograph, illustration, or picture	Under or next to the picture it refers to
Chapter Names & Headings	Gives an overview/preview of the chapter	Sequential order
Copyright page	When the book was published, where	On the back of the title page
Cover	Tells what the book is about	Image, Title, Sub-Title, Author, Illustrator
Data Table	Make information easily accessible	Can list dates, other info, into rows and columns in sequence
Glossary	Definition of words that appear in the text	Alphabetical order
Illustrations/Photographs/Pictures	Helps visualize what you are reading about and give the reader more information.	Pictures match the text topics
Index	You can find specific topics without searching through the entire book	Key words in alphabetical order and the page numbers where those topics may be found.
Page header and footer	Lists page number, title of book, chapter title	At the top and bottom of each page
Quotes	Opinions, remembrances, thoughts, in someone's own words. Could be famous lines.	In the text, caption, or standing out in a box.
Spine	Cover info, but you can read it from the shelf.	Author, Publisher, Title
Table of Contents	Location of general topics/chapters	Listed in the order that those topics/chapters appear in the book.
Text Boxes	Pops out important information, takes related information and goes into more detail	More specific information is placed in a box on the same page as the larger topic
Title Page	Author, Editor, Title, Illustrator	First page of the book

Websites

Feature	Purpose	Organization
About Us	Tells who the organization is and what their purpose is. Also tells what the site is about.	Text is paragraphs with pictures/photographs
FAQ (Frequently Asked Questions)	Answers questions about the site that people ask a lot.	Questions listed by topic
Games & Activities	Interactive learning experiences	In a section of their own or on other informational pages
Parents and Teachers Page	Reaches different audiences. Include preview activities and extension activities	offers games, activities, and resources
Pull-Down Menus	Group similar topics together	Large heading and smaller topics below with clickable links.
Search Box	Search by key word just on that site	On the opening page (home page) of the site
Tabbed Links	Allows visitors to access different parts of the website	At the top of the main page
Upcoming Events	Lists what is coming soon	Listed chronologically by the date that the event will take place
URL Box	Tells the website address (Uniform Resource Locator)	At the top of the web browser
What's New	Highlights the newest events and updates	On the home page of the site

Name:

Date:

Making the Most of Informational Text

Informational text (what we read to learn information and pursue our interests and questions) has many **FEATURES** (parts) that are designed to help readers **NAVIGATE** (find his/her way through) the resource and make the information friendly to the reader.

When a reader expects these features and knows how to use them, he/she can move in and out of the text. You can select the pages/sections you need for your topic, connect your topic with pictures, explore captions, diagrams, learn about the author...and so much more!

TASK:

- Review an informational book and an informational website to discover various informational text features.
- Record the features you find on the organizer.
- Compare the features of an informational book to that of an informational website

SOURCES:

- Books
- Website- www.history.org

SYNTHESIS: (organizing your ideas)

- Compare and contrast the features of an informational book with those of the website.
- State a conclusion about your findings.

Name:

Date:

Informational Text Scavenger Hunt!

I reviewed _____ . (Write the title of the book or website.)

Page number	Informational text feature	What is the purpose of the feature?

Name:

Date:

Round 10...Books vs. Websites!! How do the features compare?

Informational Website Feature	Purpose of the Feature	Informational Text Feature

LESSON: Understanding the organization of a website –focusing on one particular website
Grades 1-2

The Big Idea:

-Like a book, websites have an organization that makes it easier to use.

Like a book, a website has different features. With the class, list the features of book including: Title, Contents, pictures, index, glossary, end pages, author, and captions.

- Look at a Foss module with the class. (www.fossweb.com/modulesk-2/)
What features do they see? List as a class. Discuss:
 - Title of page- is there an author?
 - Layout of site-is the information in columns, article format? etc.
 - Menus-are they horizontal (the bigger picture), vertical (contents)?
 - Captions under images in the **Media** icon
 - Links within the site located under **Media** icon (usually blue and underlined, a different color shows a link you have visited already)
 - Explore the interactive feature

- **Follow-up activity**-Have pairs of students explore other Foss websites in the K-2 module.

Be sure to note that all sites are organized differently, but generallyt have the same features.

**LESSON: We have a Library Home Page on the Scarsdale Schools website
Grades K-1**

The Big Idea:

-The Library Home Page has a variety of appropriate resources for elementary school students

There are different types of resources on the library home page. The home page has a selection of resources for students.

Teacher's NOTE: These include:

- **Search engines-** Search engines: websites that search other websites based on key words. "It is the bus to take you to the website."
- **Databases**
- **Media databases**

Review the different types of resources appropriate to the students' level. These are general guidelines, subject to change based on student knowledge:

- **World Book Encyclopedia**
- **Search-a-saurus** (This site provides general information and searches magazines like Ranger Rick, National Geographic Kids, Highlights for Children, Weekly Reader, Encyclopedias, pictures)
- **NetTrekker (images, audio, readability scale)**
- **AP Photo Archive (images, good to use for emphasizing key words when searching for images)**

Follow-up activity: Students will explore some resources on the home page.

CLARIFICATION:

ALTHOUGH TEACHERS GENERALLY CHOOSE WEBSITES FOR K-2 STUDENTS TO VIEW, THIS MIGHT BE A GOOD TIME TO START A CONVERSATION ABOUT HOW THE TEACHER FINDS APPROPRIATE SITES USING VARIOUS SEARCH ENGINES.

- **Google** is a useful tool that students can use after exhausting the library homepage resources. The use of Google should be facilitated by the teacher.
- **Wikipedia** is a secondary source that children can use to find information with the understanding that anyone can post info and that goes to the reliability of the site.

LESSON: We have a library home page on the Scarsdale schools Website
Grades: End of 1st, 2

The Big Idea:

-The Library Home Page has a variety of appropriate resources for elementary school students

There are different types of resources on the web. The home page has a selection of resources for students. These include:

- **Search engines-** Search engines: websites that search other websites based on key words. “It is the bus to take you to the website.”
- **Databases**
- **Media databases**

Review the different types of resources appropriate to the students’ level. These are general guidelines, subject to change based on student knowledge:

- **Search engines** will be introduced in 2nd and reviewed each year through grade 5.
- **Databases** such as the New book of knowledge will generally be introduced in 2nd grade and Search-a-saurus will be introduced at the end of 1st, beginning of second grade.
- **Media databases** that store media (Ex: Pics for learning)

Different engines are best for different subjects.

- **Search-a-saurus: Grades 2-5**
This site provides general information and searches magazines like Ranger Rick, National Geographic Kids, Highlights for Children, Weekly Reader, Encyclopedias, pictures
- **NetTrekker- teacher can pull sites K-5, students to use 3-5**
This is a search directory that is a screened search engine. It defines the readability of information.
- **Cobblestone –Grades 4-5**
This is a search engines that searches various history magazines.
- **Kids Click- Grades 3-5**
This is a search directory created by librarians for kids.
- **Info-Trac Jr-Grades 4-5**
This is a search directory of magazines.
- **Kids Space-Grades 3-5**
This is a search directory for kids.
- **Ask for Kids-Grades 3-5**
This is a search engine for kids that connects to Fact Monster (an on-line Almanac)
- **Pics4learning-Grades 2-5**
This search engine provides pictures.
- **Artstor- For teachers, Grades 4-5**

3. Follow-up activity: Students will explore how search engines/databases work.

- www.Askkids.com (search engine)
- www.enchantedlearning.com
- www.starfall.com
- <http://www.kevinhenkes.com/>

CLARIFICATION:

ALTHOUGH TEACHERS GENERALLY CHOOSE WEBSITES FOR K-2 STUDENTS TO VIEW, THIS MIGHT BE A GOOD TIME TO START A CONVERSATION ABOUT HOW THE TEACHER FINDS APPROPRIATE SITES USING VARIOUS SEARCH ENGINES.

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LESSON: We have a library home page on the Scarsdale Schools Website Grades 3-4

The Big Idea:

-The Library Home Page has a variety of appropriate resources for elementary school students

There are different types of resources on the web. The home page has a selection of resources for students. These include:

- **Search engines-** Search engines: websites that search other websites based on key words. “It is the bus to take you to the website.”
- **Databases**
- **Media databases**
- **Web-Path Express**

Review the different types of resources appropriate to the students’ level. These are general guidelines, subject to change based on student knowledge:

- **Search engines** will be introduced mid 2nd and reviewed each year through grade 5.
- **Databases** such as the New Book of Knowledge will generally be introduced in 2nd grade and Search-a-saurus will be introduced at the end of 1st, beginning of second grade.
- **Media databases** that store media (Ex: Pics4learning)

Different engines are best for different subjects.

- **Web-Path Express: Grades 1-5**
Keyword search on the library catalogue can yield appropriate web links through Web Path Express. Sites indicate grade level readability.
- **Search-a-saurus: Grades 2-5**
This site provides general information and searches magazines like Ranger Rick, National Geographic Kids, Highlights for Children, Weekly Reader, Encyclopedias
- **NetTrekker- teacher can pull sites k-5, students to use 3-5**
This is a search directory that is a screened search engine. It defines readability.
- **Cobblestone –Grades 4-5**
This is a search engines that searches various history magazines.
- **Kids Click- Grades 3-5**
This is a search directory created by librarians for kids.
- **Info-Trac Jr - Grades 4-5**
This is a search directory of magazines.
- **Kids Space -Grades 3-5**
This is a search directory for kids.
- **Ask for Kids -Grades 3-5**
This is a search engine for kids that connects to Fact Monster (an on-line Almanac)

- **Pics4learning-Grades 2-5**
This search engine provides pictures.

Follow-up activity:

Students will explore how search engines/databases work.

- School library catalogue on the library home page for each school (database)
- Grolier on Line on library home page (both database and search engine because it has links to the world)
- www.Askkids.com (search engine)
- www.nasa.gov (database)
- <http://www.westchesterlibraries.org/> (list of many search engines available to Westchester residents)
- www.nara.gov (database)

Students will determine whether the sites are search engines or databases or both. Students will use an example from the site to support their conclusions. Share as a class to discuss findings.

CLARIFICATION:

- **Google** is a useful tool that students can use after exhausting the library homepage resources. The use of Google should be facilitated by the teacher.
- **Wikipedia** is a secondary source that children can use to find information with the understanding that anyone can post info and that goes to the reliability of the site.

LESSON: School Library Resources
Grades 1-4

The Big Ideas:

-The school library collection is a foundational resource for inquiry learning.

-Inquiry research uses many types of materials from the library.

-Different book genres enhance the learning experience.

- Gather the following on the topics of study:
 - Fiction
 - Non-fiction
 - Magazines
 - Videos
 - Computer simulations
- Provide pairs of students with an assortment of materials from the library or show students excerpts from each type of material.
- Have the children discuss the differences between these types of texts.
- What can you learn from each type of text?
- Have the students use post-its to tag pictures, diagrams, pages they think will help them gain information about the inquiry topic.

**LESSON: Resources outside the school
Grades 1-4**

The Big Idea:

-Students need to be able to make use of resources outside the school as well as those in the school library or computer lab.

Museums and community resources are essential in Inquiry research in the primary grades. These resources provide a real-world application for school- based Inquiry research.

Students should be exposed to a variety of resources. Some examples of resources outside the school include:

- Experts
- Public Library
- Museums
- Objects
- Movies
- Field trips
- Other community resources

LESSON: Keywords and Library Books

Grades K-2

The Big Idea:

-You can use “Keywords” to find books on the library shelves.

Part 1:

Define Keywords with children.

- Review keywords as important words that define your subject.

Introduce the electronic “Library Catalog” on the library home page.

- Explain that the catalog is a list/index of all the books in the library and will tell you on which shelf you can find the book.
- Go to the catalog and show where to find “Destiny Quest.”

Brainstorm different keywords that support your subject. Think of synonyms (grade 2) and related words.

- Ex: Choose the topic “Farm” and type in Destiny Quest search box.
- Show the children the different books available. Discuss how they can see the title, author and call number (location).

Part 2:

What do the call numbers mean?

- Explain that every book has a number, like the address on your house. This number tells where the book lives on the shelf in the library.
- Different numbers stand for different types of books. For example:
 - 500 = science
 - 700 = art
 - 900 = history and biography
- Model searching for a topic using the library catalog.
- Provide children with a printout listing the title, author, and call number of a book. Have pairs search the library to find the book.

NOTE: Keywords have to be spelled correctly!!!! Keywords can be copied and pasted into search boxes

LESSON: Keywords to Guide Searches Using Data Bases

The Big Idea:

-Keywords help you define your subject and narrow your search on the Internet.

Define Keywords with children.

- Use their ideas to define keywords as important words that define your subject. These are words that the computer will look for on a website.
- Provide a topic to the class and model brainstorming keywords that will help find information about the topic.
- Brainstorm different keywords that support your subject. Think of synonyms (grade 2) and related words.

Introduce *World Book for Kids* on the library home page.

- Define **Encyclopedias** with the children. Encyclopedias have facts about all different subjects.
- Go to World Book for Kids home. Repeat lesson 3 on the organization of a website. Explore the different aspects of the World Book for Kids site.
- Introduce the **search box**. Introduce the **tool bar** at the top.

Grades 1-2

Model how to use keywords within the *World Book for Kids* link on the library homepage.

- Ex: Choose the topic “Farm” and type in search box. Show the children the different images and links.
- Ask the children what other keywords can be used to get information about a farm.
- Type in “farm animals” and explore the different links here.
- Type in “sheep” and discuss the different links. Also show the difference between typing in “chick” vs. “chicken.”

Follow-up activity: In pairs, children practice using keywords for a topic. Some good topics include: K-fabric, seeds, 1st families, plants, chickens 2nd-communities, city, birds, mammals

Grades 3-4

Model how to use keywords within the *World Book for Kids* link on the library homepage.

- Ex: Choose the topic “New York City” and type in search box. Show the children the different images and links.
- Ask the children what other keywords can be used to get information about New York City.
- Type in “Manhattan” and explore the different links here.
- Type in “Empire State Building” and “Central Park” and discuss the different links.

Follow-up activity: In pairs, children practice using keywords for a topic. Some good topics include: Ex: New York City, planets, government, endangered species, voting, elections

NOTE: Keywords have to be spelled correctly!!!! Keywords can be copied and pasted into search boxes

**LESSON: Understanding Informational Text -Reading pictures
Grades K-4**

The Big Ideas:

-Non-fiction books and websites have pictures, diagrams and illustrations that give us information.

-When students study photographs or detailed pictures they learn more about their topics.

-Researchers use pictures, illustrations and diagrams to discover the important role they play in non-fiction texts.

Pre-Lesson preparation:

- The teacher must have a supply of non-fiction books and websites (one for each pair of students) with pictures, diagrams and illustrations available for the children.
- Use a non-fiction big book or website for demonstration (picture walk) purposes.

Part 1:

Picture walk or “reading a picture”, first time:

- Teacher will model quickly reading (skimming) through a non-fiction big book. Briefly comment on the pictures but do not spend much time discussing the details, information or features. Verbally discuss what they learned about the topic- information should be limited or minimal.

Picture walk or “reading a picture”, second time:

- Teacher will model reading through the non-fiction big book a second time, as a “Scientist”, or “Detective”- searching for information and details in the pictures. During this second picture walk the teacher will stop and model her/his thinking aloud about the information that the pictures provide on a few pages.
- As you look at a page together, the teacher will invite students to talk about what information they are learning from the picture. “Let’s take a look at this page.”
- “The author is using photographs and drawings as well as words to teach us about...” “What’s something you learned from the picture?”
- Chart student’s ideas and responses.
- Ask, “How was the second reading different from the first reading?”
- “How do you think this strategy will help you understand our/your topic better?”

- Discuss how pictures along with words will help them learn more about their topic (especially if they can't read).

Part 2:

Students practice “reading a picture.”

- Teacher will distribute a non-fiction book to each pair of students.
- Students should be encouraged to briefly skim through the entire book and pick one page to study together.
- As they look at the page together, students should talk or jot down or discuss what the picture is teaching them.
- Together, each pair of students should share their ideas, information or discoveries, either in a jigsaw format or as a whole group.
- Whole group wrap up:
“Are pictures important? Why or why not?”
- “How do pictures help us learn more about a topic?”
- Chart and post responses- these responses will become an anchor experience for the entire class.

LESSON: Understanding Informational Text- Researchers use pictures, sketches, drawings and photographs to discover the important role they play in non-fiction texts.

Grade 1-4

The Big Ideas:

-Photographs, sketches, pictures and drawings provide information.

-Students can analyze photographs or detailed pictures to learn more about their topics using an organizer.

Model how to use the Photograph Analysis Sheet:

Show students a large picture from the turn of the century or shortly before or after. Examples include policemen on bicycles, firemen using horse drawn carts, early telephone switchboard, children working in factories, stagecoaches, etc.

- Draw a chart that has columns for people, objects and activities.
- Ask pairs of students to examine the photograph looking only for people. Who are the people they see? Are they children? Toddlers? Older people? Teenagers? Women? Men? List
- Next, ask the pairs to examine the photograph for objects (things). List
- Finally, ask the pairs to examine the photograph for what the people are doing, or what is happening. List
- Ask the children what they learned about the lives of the people in the photograph? Discuss.
- Ask the group, “How can pictures help us learn more about a topic? How is “reading a picture” similar or different to reading words in a book to gather information?”
- Practice analyzing a photograph with the class using a photograph on the inquiry topic. Students that can write can use the Photograph Analysis Sheet.

Name _____ Date _____

PHOTOGRAPH ANALYSIS WORKSHEET

Step 1. Study the photograph. Try to notice all of the details in the photograph. Observe:

- the people in the photograph
- the objects
- the activities (what is happening)

After studying the photograph, complete the steps in the analysis.

People	Objects	Activities

Step 2. Inference

Based on the pictures, tell something about the life at this time.

1. _____

2. _____

Step 3. Feelings

If you were a person in the photograph, what would you be thinking?

Step 4. Questions

What questions do you have about life at this time?

1. _____

2. _____

Where can you find the answers to these questions?

1. _____

2. _____

**LESSON: Understanding informational text- Students will read, remember, retell and write what they have read as ONE WAY of constructing understanding
Grades 1-4**

The Big Ideas:

-Students will retell what stands out in their mind.

-Students will select ideas and generate structured sentences based on what they have read.

-Students will raise new questions

Part 1:

Note taking is an essential skill for gathering information. As students read, they need to learn to consciously focus on remembering informational text. Students will take more responsibility for their learning and read more carefully. Students remember and write the information and new ideas and questions. A journal is used for writing down facts and thoughts. Examples of journals are attached.

- Model the “Read, Remember, Retell” strategy. At this point, students are not yet writing the information gained.
- Choose an appropriate book or website that contains information on the inquiry topic.
- Read about as much text as you can cover with one hand. While reading the book aloud, reveal what you are thinking, how your thinking has changed from before and any new ideas or questions you may have.
- Turn the text over and consciously try to remember what you have read. This is a quiet moment for thinking.
- Turn to a partner and tell your partner what you remember. Remind students that it is OK to peek back at the book if they need to. Good readers do this all the time.
- **MODIFICATION:** Before students retell the information to their partner, they can sketch their ideas about what they read first in the note-taking journal which introduced in Part 4.

Part 2: Practice

- Partner students.
- Have students practice the read, remember, retell model.

LESSON: Understanding Informational Text- Students will use read, remember, retell and write to take notes as they research

Grades 1-4

The Big Ideas:

-Students will retell, remember and write what stands out in their mind.

- Notes help us remember information.

- Researchers use research journals to organize ideas.

The teacher will model the Read, Remember, Retell strategy, but add the writing component. Research Journals will be introduced.

Discuss:

- Ask students why researchers write down the information they have gathered from books, pictures or interviews. Introduce the term note-taking.
- Help students discover that notes and journals:
 - Help us remember and organize our ideas
 - Hold all our information in one place
 - Keep our questions and new thoughts
 - Prevent us from losing our information
- Ask students to brainstorm different ways of note-taking.
- Ask students to help create a research journal that would contain a cover page notes, new thought and questions, new vocabulary terms, pictures etc.
- On a chart, co-construct a list of the kinds of things that are included in a research journal. Begin by showing your research journal or an example journal. Have kids turn and talk about what would be included in a research journal. Share and chart.
- Show a research journal to the class. On the cover page, students can draw a picture that provides information on their topic.
- Show the students sample pages for note-taking. There is a page for drawing pictures related to information and there is a place for written information and new ideas or questions.

Model Note-taking:

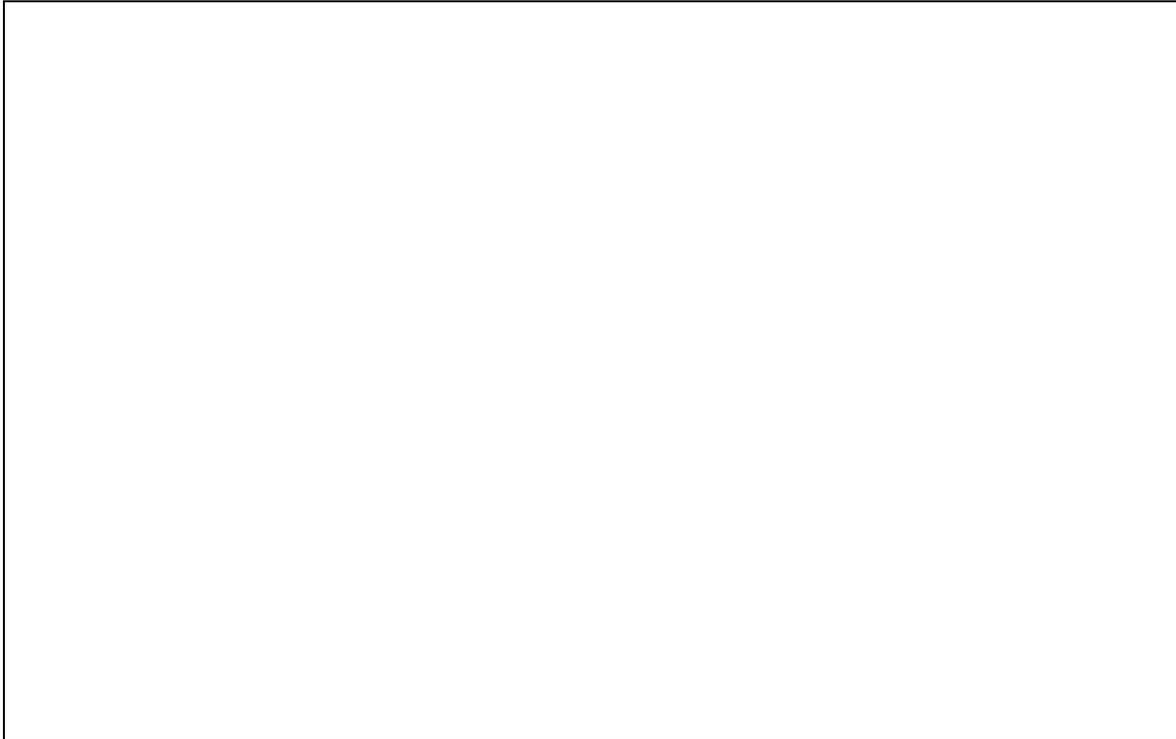
- Model the “Read, Remember, Retell” strategy. This time demonstrate how you might write and draw the information you remembered in the journal.

- Demonstrate how this time you wrote down a new idea or question you had about the topic. Draw on the previous lesson about structured sentences.
- Discuss why you wrote this particular information. Was it new to you? was it something different than what you thought before? Was it interesting to you?

Students practice note-taking and writing structured sentences after using the “Read, Remember...” strategy.

See example note-taking journal pages for primary and upper grades.

MY RESEARCH JOURNAL



Topic:

Researcher:

Drawings/pictures related to information:



Citation:



Today's date	
Source (title, author, publication, date, URL, etc.)	
Sub-question Answered	
Notes (information in my own words)	
Ideas (record here your ideas and reactions to the information, ways to use it in your paper, your opinions, or further research you need to do on the information)	
New Questions	

Additional Informational Text Lessons

“Informational texts have many features that are designed to support readers in navigating through resources and providing reader-friendly access to content.” Linda Hoyt, *Make it Real, Strategies for Success with Informational Text*.

Lessons that guide children to discover the kinds and purpose of these features can be found in Linda Hoyt’s book, *Make it Real, Strategies for Success with Informational Text*, Heinemann 2002.

Some suggested lessons from this book are:

- Informational Book Sorts
- Text Feature Scavenger Hunt
- Making Informational Text Features
- Using the Table of Contents
- Using Boldface Type
- Searching Informational Texts
- Informational Reading Strategy Observation
- Questioning As You Go

LESSON: Understanding Informational Text-Students will remember new topic related vocabulary as a way of constructing understanding.

Grades 1-4

The Big Ideas:

-Students will retell vocabulary words that stand out in their mind.

-Students will select create a glossary of new vocabulary words

Introduce “glossary”. After students have had an opportunity to read for a while, introduce the term, glossary.

- Show students examples of various glossaries.
- Discuss the purpose of a glossary.
- Show students the glossary pages in the note-taking journal. Model the read, remember, retell and Write strategy. During your thinking aloud, model thinking about a new vocabulary word.
- After taking a note in the journal, go to the glossary page and demonstrate how to write the vocabulary word in one box. It may be a good idea to write the new vocabulary word in one color and the meaning in another color.
- As students continue to Read, Remember, Retell and Write, have them focus on finding new vocabulary words and using the glossary.

Glossary

New Vocabulary

Definition in my own words:

New Vocabulary

Definition in my own words:

New Vocabulary

Definition in my own words:

LESSON: Primary Sources-Personal Interviews

Grades k-4

Big Ideas:

-Interviews are one of the most effective primary research tools.

-Open-ended questions provide more information than closed-ended questions.

-Students/Researchers prepare interview questions prior to the interview.

About midway into the inquiry process, teach students how to interview specialists in the field. On the first day, demonstrate interviewing and creating different levels of questioning and on the second day, have students practice interviewing a partner on their inquiry topic. Interviewing is appropriate for all children. The most important idea children can learn about interviewing is to listen carefully.

Part 1: Modeling an interview:

- Find a colleague to demonstrate how to conduct an interview. Ask students to notice what you do as you interview. Explain that as an interviewer, your goal is to get as much information as you can from the expert; this may be the only time you get to ask this person questions.
- Have students observe your physical behavior (eye contact, voice) as well as the kinds of questions you ask.
- With older students, demonstrate how you wrote down some specific questions prior to the interview using the “Asking Good Questions” sheets.
- Demonstrate how you jot down notes during the interview to help you remember what the expert said. Be sure to combine words and pictures. Share this with the class.
- End the interview with the phrase; ”Is there anything we should have asked you that we didn’t?”
- Have students turn and talk about what you are doing. Have them think of follow-up questions they might add to the interview.
- Have students identify the steps and stages of interviewing. Have them discuss what they learned about interviewing. Chart.

Part 2: Students practice interviewing:

Grades 2-4

- Students will practice interviewing each other about their inquiry topic.

- Using the “Asking Good Questions” sheets, students write at least one interview question from each level of questioning. Remind students that during the interview they may ask follow-up questions that build upon the interviewee’s response even if these questions do not occur to them before the interview
- Discuss which questions would be good beginning questions for an interview and why.
- Review the chart about the stages of the interview. Review etiquette with the students and discuss ways the students could greet the visitor and how they should sit etc. during the interview.
- Remind students that a good way to end the interview is by asking, “Is there anything we should have asked you that we didn’t?”
- Students must also decide how to record their information prior to the interview. They may either draw, take photographs, write, or tape their interviews.
- One or two students could be assigned to be the photographer for the interview if it is taking place in class.

Grades K-2

- Students can practice interviewing with someone who works in the school that is not familiar to them. The interview will take place whole class.
- Younger students use the question cards to brainstorm questions to ask prior to the interview. During the interview the students hold the cards to help them remember, and then ask questions.
- The teacher records the answers on the board in words and pictures. After the interview, review the information with the class. The students will draw and write a sentence about one important piece of information they remember from the interview.
- Remember to ask the interviewee to bring artifacts, photographs and documents along with him/her to the interview if it will take place in class.

After the interview:

- The students will use the information when they synthesize the information. They can learn how to organize their notes, combine ideas, construct a book or letter to the interviewee etc.
- Ask students to record any questions they have as a result of the interview.

- Students, if really interested, can pursue any topic that came up during the interview either individually, in small groups or as a class. This can become a “mini-inquiry.”

****For more on Interviews see Nonfiction Matters chapter 9, Primary Research: Going Directly to the Source, by Stephanie Harvey and Interviews, by Paula Rogavin**

LESSON: Citations
Grades 1-4

The Big Idea:

-We cite information we use in research.

After the students have had opportunity to read a book, or website or interview a person, introduce the concept of citation/bibliography.

- Introduce the idea that when we find information in a book or on the Web or in an interview we have to make a list called a bibliography. This list tells us, and others, where we found the information. We do this for 2 reasons:
 - To share info with others
 - To give credit to the people who made the information
- This is called a “CITATION”

Grades K-2

- Students can either cite sources using a P-people, B-book, or C- computer or draw simple appropriate symbols that are decided on as a class.
- For 1 grade, students can also write title of the book or the site. In 2nd grade, students will write the title, author, and copyright date for a book and the Title of the web page and URL for a website. Emphasize that the URL has to be written EXACTLY as it appears.

Grades 3-4

- Students can use a template to cite books or use <http://citationmachine.net/>

Review (End)

Before finishing the process and product, students stop and think – Is this done?

- **What can I produce to show what I know?**
- **Did I do what I was supposed to do?**
- **Do I feel OK about my work?**
- **Should I do something else before I say, “I’m done?”**
- **Present the information I have gathered**

Big6 Steps:
Synthesis
Evaluation

LESSON: Synthesis Using Conceptual Mapping

Grades 1-2

The Big Idea:

-Information is most useful when it is connected to other information.

-Basis readers need step-by-step instruction in how to connect facts until they are better able and ready to do it on their own.

Grades 1-2

Pre –Lesson preparation

- Have the class chart displayed showing student independent inquiry topics.
- Have a big book for read aloud that is topic specific to whole group research
- Use a Lego structure made by the students at a previous free choice as a model for this lesson.
- Have several leveled informational texts on the inquiry topic.
- Have a poster-sized version and copies of synthesis conceptual map prepared for student pairs (see graphic organizer – synthesizing map).

Part 1:

Use “Legos” to demonstrate how to connect isolated facts into a bigger idea.

- Gather students in meeting area. Have a LEGO structure displayed.
- Call students’ attention to the Lego structure. Ask students if they have ever created anything from Legos. Ask if they can make anything out of 1 piece of Lego.
- Compare isolated facts as Legos. One piece of Lego creates nothing, but when you combine pieces you can create a whole structure/object.
- Use the analogy that it is difficult to build anything with just one Lego. Many pieces were needed to build the Lego structure. Make the connection that you can't do much with just one piece of information. You need many pieces of information connected together to make the information useful. When we connect one piece of information to another and have new ideas, we call that **SYNTHESIS**.
- Each piece of information is like a Lego. If you take a lot of facts and synthesize them, **CONNECT THE FACTS**, you synthesize and you can do much more with the information.
- Review synthesis with the students:

Like Legos:

- One fact alone isn't very useful.
- Connecting the facts into chunks or organized patterns makes it easier to learn.
- There are so many ways to put facts together.
- You can create many different things with the same facts.
- Different people might build different structures from the same facts.
- When you've had a lot of practice, connecting the facts gets easier.
- Facts have to be related to give you a bigger picture of your topic.
- The more you sort and arrange facts in different ways, the more ideas you get.

Part 2:

Using Conceptual Maps to Synthesis Information and Facts

Show students the conceptual map and how new information is built upon in each square as students' read and their thinking evolves with new information.

- The teacher will model how to connect/synthesize discrete facts using the whole class inquiry topic or one child's/pairs' topic.
- Use a big book that is specific to the class inquiry topic. Ask students what they know about the topic. Write the information into the first step on the chart-**When I first started researching I thought...**
- Ask the class to think about the next step-**After research, now I'm thinking...**in the conceptual map while teacher reads the book aloud. Prompt students to reveal their thinking while teacher questions: What do we know now?
- After reading, ask the class to think about the final step in the chart-**Some new questions I have are...**
- Repeat the prompts while reading and adding information to the graphic organizer.
- Look for evidence that students use authentic questions, inferences, and interpretations to synthesize information.

Day 2

Pre –Lesson preparation

- Display a poster-sized version of synthesis conceptual map that was completed by students on the previous day.
- Have copies of synthesis conceptual map prepared for student pairs
- Choose a students research journal as a model
- The teacher will model how to connect/synthesize discrete facts using a student's

research journal

Part 1:

- Remind the students of the previous lesson that was held on synthesis. Review the poster sized conceptual map that they created in the previous whole group lesson. Review the process and evolution of information that the class underwent by calling on numerous children to summarize the process.
- Model the same lesson using a student's research journal.

Part 2:

- Ask students to reread their research journals in pairs or individually.
- As they read students should fill in the synthesis organizer as they came across new questions and as their thinking evolves. The process would continue until the journal and the organizer are completed.
- Circulate among the groups and help students that needed assistance in getting started or completing activity. Prompted the students to think about what they learned after they read each page or a section of the journal.
- After a reasonable amount of time passes, call the students to the carpet to share new (evolved) thinking they have about their topics. Allow as many student pairs to share as you have time for.

Name _____ Date _____

Synthesizing _____

When I first started research, I thought

After my research, now I'm thinking

Some new ideas and questions I have now are

LESSON: Synthesizing and sharing information
Grades K-2

The Big Ideas:

-When we research, we combine ideas from different sources to construct new ideas and a deeper understanding of the information.

-Student's new understandings can be presented in a variety of ways.

Discuss with the class the importance of sharing the information gained to educate others.

- Have students list the sources they used to gather information.
- Compare the sources to a fruit salad. Each source has its own information, but to understand all the different information, (the fruit salad) we combine all the different information to make something new.
- Present a wide array of ways people display what they know.
- Refer back to the SOURCE LIST the children created after they went on their source hunt. The students can walk around the school again to see how other students have displayed their information. Some examples are:
 - Posters
 - Clay
 - Art
 - Models
 - Murals
- The teacher can either choose a form for the product, a small groups of children can work together on a product or students can choose a product individually.

For example, the entire class can make posters, or work on a mural. Alternatively, small groups of students can work together to create one product to show what they know. Students can then have a choice of product and work on something that fits with their interest and style.

**LESSON: Synthesizing and sharing information
Grades K-2**

The Big Ideas:

-When we research, we combine ideas from different sources to construct new ideas and a deeper understanding of the information.

-Student's new understandings can be presented using technology.

Discuss with the class the importance of sharing the information gained to educate others.

- Have students list the sources they used to gather information.
- Compare the sources to a fruit salad. Each source has its own information, but to understand all the different information, (the fruit salad) we combine all the different information to make something new.
- Present a wide array of computer generated forms of communication in addition to role-play, posters, illustrations, oral presentations etc. This might include video conferencing (interviews), podcasts, Photoshop, and Kidspiration, Key Note, posters.
- The teacher can either choose a form for the product or small groups of children can work together on a product.

For example, the entire class can make posters, do Kidspiration webs, Key note etc. or small groups of students can work together to create one product to show what they know. Students can then have a choice of product and work on something that fits with their interest and style.

LESSON: Synthesizing and sharing information- Using Howard Gardner's Multiple Intelligences to show what you know

The Big Ideas:

-When we research, we combine ideas from different sources to construct new ideas and a deeper understanding of the information.

-Student's new understandings can be presented in a variety of ways depending on their combination of "intelligences."

Grades 2-4

Discuss with the class the importance of sharing the information gained to educate others.

- Have students list the sources they used to gather information.

Discuss how each of us has a unique combination of "smarts".

- People have many different ways of learning. The concept of "Multiple Intelligences" developed by Howard Gardner, a psychologist and professor, helps us recognize that human beings have many "intelligences," but each person has a unique combination of these intelligences. All students have all intelligences. By encouraging the whole range of intelligences, students are motivated and strengthen their intelligences.
- When you begin to understand how you like to learn you can determine how you would like to show others what you learned.
- Students in Grade 4 can fill out the handouts to help them discover their different kinds of "smarts." Younger grades can look at the visuals to help them think about how they like to learn and their different kinds of "smarts."
- After students think about how they like to learn, have them brainstorm ways to show what they know that incorporates their kind of smart. An example list is provided.
- Once students review the different kinds of smart and get a feel for how they like to learn, they will fill out a project proposal describing the product they will create to show what they know.