### **Adult Education Lesson**

Lesson Title: Digging for Dinosaurs	Topic: Research and notetaking
Level: (ABE, ASE, ESL, multi-) Multi-	Timeframe: 1 – 1:10

### College and Career Readiness Standard:

Writing Anchor # 1: Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.

**Level A:** Participate in shared research and writing projects (e.g., explore a number of "how-to" books on a given topic and use them to write a sequence of instructions). (W.1.7)

Level B: Conduct short research projects that build knowledge about a topic. (W.3.7)

## **ELPS Anchor and Level Correspondences:**

**ELP Standard 5**: An ELL can conduct research and evaluate and communicate findings to answer questions or solve problems.

Level 1: An ELL can with support,

- Carry out short, shared research projects
- Gather information from a few provided print and digital resources
- Label collected information, experiences, or events
- Recall information from experience or from a provided source

Level 2: An ELL can with support,

- Carry out short individual or shared research projects
- Gather information from provided print and digital sources
- Record information in simple notes
- Summarize data and information

# Adult Education Lesson Objectives:

At the end of this lesson, adults will be able to:

- conduct short research to build knowledge;
- organize information in the form of notes that will assist in recall; and
- share findings with each other to expand and clarify knowledge.



#### Materials:

- Reference books/nonfiction books/picture encyclopedias with dinosaur entries (try to have two sources per participant so that there will be choices for reading). Choose materials appropriate for participants' reading levels. See <u>Dinosaur Reference Books</u> in the Resources section for suggestions. If possible, use books that families can check out for home use.
- Pencils or pens
- Copies of dinosaur notecards for each participant, available for specific facts, general facts, or without prompts.
- Copies of Catch Me If You Can! By Bernard Most
- Chalkboard, whiteboard, or large sheet of paper
- Post-it notes, page markers, or flags (optional)

Lesson Vocabulary:

Ankylosaurus carnivore Diplodocus Hadrosaurus Iguanodon nonfiction omnivore paleontologist phonetic research Stegosaurus Struthiomimus Triceratops Tyrannosaurus rex

**Adult Education Activity** 

Activity	Notes to the teacher	Grouping	Time
Welcome/Icebreaker: Begin class with a whip around:  • "If you were a dinosaur, what kind of dinosaur would you be and why?" or  • "Share one thing that you find fascinating about dinosaurs."  The instructor should answer the question and invite the next person on their left to respond. Discuss the popularity of dinosaurs among children. Note that sometimes children know more about dinosaurs than adults.	A whip around is a discussion strategy that encourages participation by inviting each student to share a brief thought, opinion, or response to a prompt offered by the teacher. It can be used to initiate a lesson or check for understanding at the conclusion of a lesson.	whole group	5 minutes
Review Objectives: In this activity, participants will research the dinosaurs found in Catch Me If You Can! by Bernard Most, so that they can share some interesting information about these prehistoric creatures.	<ul> <li>conduct short research to build knowledge;</li> <li>organize information in the form of notes that will assist in recall; and</li> <li>share findings to each other to expand and clarify knowledge.</li> </ul>	whole group	5 minutes

Adult Education Lesson Catch Me If You Can!



To do so, participants will use nonfiction texts to read closely and then write down notes that will help to explain ideas clearly and accurately. Participants will present findings to each other to expand and clarify dinosaur knowledge.			
Opening Activity:  Pass around copies of Catch Me It You Can!, by Bernard Most, and note that it is filled with dinosaurs. Scan the pages of Catch Me It You Can!. There are images of a variety of dinosaurs: Ankylosaurus, Diplodocus, Hadrosaurus, Iguanodon, Stegosaurus, Struthiomimus, Triceratops, and Tyrannosaurus Rex. Discuss with the class what, if anything, we already know about dinosaurs. "What are some interesting facts that you already know about dinosaurs?" Use the chalkboard or large surface to list some of the prior knowledge participants have about dinosaurs.  If participants are unfamiliar with the book, the instructor should read it to them.  There are several types of nonfiction resources available to learn more about dinosaurs that can help boost knowledge before reading together or help to answer questions that may be asked while reading.	Ankylosaurus an-KIE-loh-sore-us Diplodocus DIP-low-DOCK-us Hadrosaurus HAD-row-SORE-us Iguanodon ig-WHA-noh-don Stegosaurus STEG-oh-SORE-us Struthiomimus STRUTH-ee-oh-MEE-mus Triceratops try-SAIR-uh-tops Tyrannosaurus tie-RAN-noh-SORE-us	whole group	10 minutes
Central Ideas and Practice: Building knowledge through research can be an engaging and empowering process. Research skills are beneficial in a variety of everyday situations. For instance, when purchasing a product or service, conducting brief research can help in finding the best option for one's needs and budget. Or it can be beneficial to research about a medical condition or treatment in order to make informed decisions about one's health. Many of us may research meal options or workout routines to maintain a healthy lifestyle.  Perhaps, when traveling you may wish to sightsee or		whole group	5 minutes

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dine in some local restaurants, without knowing a local resource, it is helpful to research the area. Research can be short and focused to assist in expanding understanding.  In all these situations, it is helpful to start with a goal or question: What do you want to know?  For this class, the goal is to learn more about dinosaurs — in particular, to learn more about the dinosaurs within the book Catch Me If You Can!			
Direct Instruction:  To begin, generate questions together: "What do we want to know about these dinosaurs?"  Some suggested questions:  • how to pronounce their name? (phonetic spelling)  • where did they live?  • when did they walk the earth?  • what did they look like (distinguishing features)?  • how large and heavy were they? (pounds, length, size compared to person or familiar object)  • what did they eat? (carnivorous, herbivore, omnivorous)  If possible, write these questions and notes on a board or sheet of large paper for visual reference during independent practice.  Show the participants an array of nonfiction dinosaur resources and distribute the dinosaur notecards for notetaking. The nonfiction dinosaur books contain information about a lot of different dinosaurs, but our goal is learn about those within Catch Me If You Can! Therefore, we don't need to read the entire book. We can scan the table of contents or flip through the pages hoping to find the names of the dinosaurs. The index is a helpful tool when trying to quickly locate information.	Phonetic spelling, breaking words up into syllables and sounds, is a tool for pronunciation. It is often with names. If appropriate, demonstrate how participant names can be spelled phonetically.  Break the name into syllables. Capitalize sounds that are emphasized (eg. Rihanna = ree-AH-nah, Javier = ha-Vee-air).	whole group	15 minutes



Model using the index to identify pages with relevant information. The index is arranged alphabetically and indicates what pages offer information about the keyword. Much like using a search engine, like Google or Safari, begin with a keyword, name, or topic. In this case, start with the name of a dinosaur. The index provides the page numbers that have information about this dinosaur.	When modelling the use of an index, share that information about the topic can be found on the page numbers listed. If the topic name is not listed within the index, consider other keywords that may also refer to the same topic.		
Guided Practice:			
Distribute the dinosaur notecards. The notecards have a space to gather and organize information in two formats: select which will be best for the participants.  What do we want to know? Review the questions generated by the class Ask the participants to assist in gathering information, while the instructor models simple notetaking. Offer the name of a dinosaur and use the index to see what type of information the resource book may have about the dinosaur. Post-it notes, page markers, or flags can be used to mark information within the book for reference.  As a class, jot down key words or phrases on the corresponding notecard.	Evaluating resources is also an important element to research. Although dinosaurs lived long ago, paleontologist are continuing to learn more about them with the advancements in technology and continual discoveries. How might a text written in 1950 provide different information than one written in 2023?  Using post-it notes, page markers, or flags to identify passages or jot down key pieces of information can increase active reading and organize research tasks. It may be helpful for readers to mark key facts with a post-it note and then return to transfer the information to the notecards. Some readers may benefit from having designated color post-it notes (one for to mark information about where the dinosaur lived; one for what they ate; and another to mark information about their size) to organize research.	whole group	5 minutes
	Digital resources can also be used in research. The Dinosaur Reference Booklist contains links to other resources.		



Independent Practice/Formative Assessment: Ask the participants to choose one (or more) kind of dinosaur to research either individually or in pairs. Ideally, divide the dinosaurs to research evenly among the class. Remind participants of the questions that will guide their research. Circulate during worktime to assist participants in research techniques.  When all have finished, sit in a circle, and discuss findings as well as which resources were most helpful. Note which facts receive the greatest response from listeners; these may be fun to share while reading Catch Me If You Can! with children. Praise participants for their research and for attempting to pronounce dinosaur names!	This is an appropriate time to give learners individual feedback and assistance in their notetaking and research.  Ankylosaurus an-KIE-loh-sore-us Diplodocus DIP-low-DOCK-us Hadrosaurus HAD-row-SORE-us Iguanodon ig-WHA-noh-don Stegosaurus STEG-oh-SORE-us Struthiomimus STRUTH-ee-oh-MEE-mus Triceratops try-SAIR-uh-tops Tyrannosaurus tie-RAN-noh-SORE-us	individual or pairs	15 minutes
Review Objectives:  To learn about dinosaurs, participants were asked to read closely to find specific information from nonfiction resources. Before starting research, participants first determined what they wanted to know, with questions starting with what, where, when, and how. In using the index of nonfiction books, participants located pages within the text that were relevant to the topic. Notecards (and post-it notes) helped to organize information and were used to recall dinosaur information. In sharing these facts with each other, participants increased knowledge and understanding.  The participants can share the information gathered to talk about the dinosaurs with their children while reading Catch Me If You Can! Remind parents that such conversations are an important way to encourage learning and foster connection.	<ul> <li>conduct short research to build knowledge;</li> <li>organize information in the form of notes that will assist in recall; and</li> <li>share findings with each other to expand and clarify knowledge.</li> </ul>	whole group	5 minutes



Wrap-Up/	'Closure:
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Research skills involve the ability to identify a question (what do you want to know?), collect resources, search for information, sort through content, and organize relevant information to answer the question. These skills can be used in a variety of situations, such as using an index of a cookbook to find a recipe that uses a particular ingredient; or researching the steps to complete a home repair; or discovering the most effective sunscreen. With the vast amounts of information in libraries and on the web, the ability to find, filter, organize and communicate information to others can be beneficial in a variety of situations.

Ask participants to brainstorm ways in which they might use these skills in everyday life. There may be opportunities to research when questions arise when reading together, discussing topics from school, or wanting to expand understanding outside of the classroom.

Consider how these same skills are used when researching on the internet:

- identify a question (such questions as who, what, where, when, why, and how),
- search by a keyword or topic,
- sort and organize information, and
- cite specific textual evidence to support conclusions drawn from the text.

## Or when using a library:

- identify what you want to learn,
- locate resources by searching a catalog with keywords,
- evaluate sources to see if accurate, current, or unbiased,
- organize information by taking notes or marking pages with post-it notes.

whole group

5 minutes

