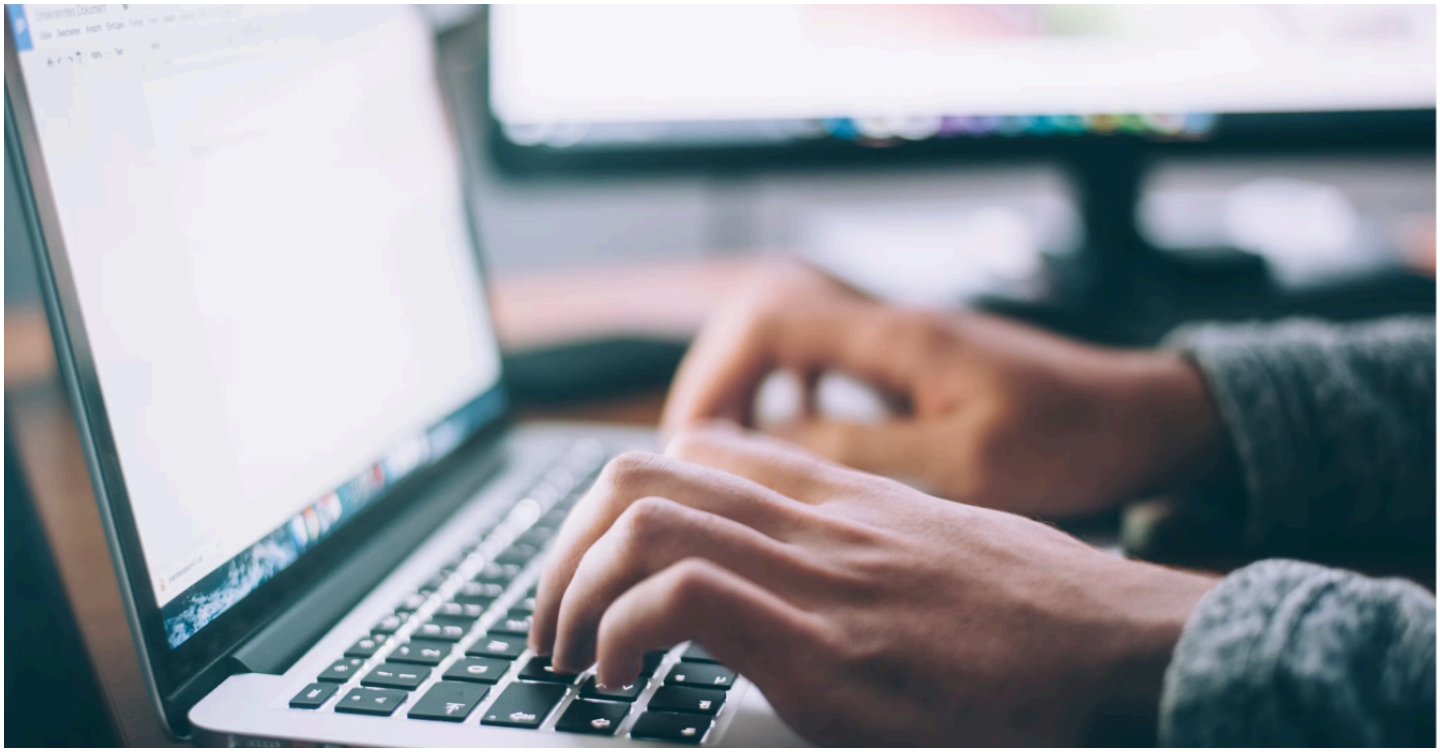

Compelling Question: What does it mean to be a researcher?		
Supporting Question #1 What is research?	Supporting Question #2 How do we ask effective research questions?	Supporting Question #3 How do we effectively find, document, and organize information?

Overview of Inquiry

The purpose of this inquiry is for the students to

1. Understand what research is and its purpose in society.
2. Know the various modes of completing research (as will be done in science and social studies).
3. Be able to identify the connections of research between disciplines.
4. Be able to understand the purpose and goal of this project and their individual impact/contribution.

To demonstrate their learning, the students will

1. Correctly identify the research terminology taught in this lesson.
2. Write an overarching research question and more detailed and specific supporting questions.
3. Generate search terms to find credible sources
4. Correctly document sources using MLA formatted citations

5. Use the knowledge and skills gained from this lesson to find a relevant source and accurately document it using MLA citations, take effective notes on the source, and create specific research questions related to the article.

This inquiry is designed for a high school English 9D course and highlights the following standards:

Nebraska High School English Language Arts Standards

- ***Reading Informational Text LA.10.RI. 8*** Read and comprehend a wide range of informational text of appropriate complexity at the high end of the 9-10 grade band proficiently, with scaffolding as needed at the high end of the range.
- ***Vocabulary LA.10.V.1*** Integrate grade-level academic vocabulary appropriately for a variety of tasks and purposes.
- ***Writing LA.10.W.6*** Gather and use credible evidence from multiple authoritative sources and assess its relevance in answering the research question(s).

C3 Framework

- ***D1.5.9-12*** Determine the kinds of sources that will be helpful in answering compelling and supporting questions, taking into consideration multiple points of view represented in the sources, the types of sources available, and the potential uses of the sources.
- ***D3.1.9-12*** Gather relevant information from multiple sources representing a wide range of views while using the origin, authority, structure, context, and corroborative value of the sources to guide the selection.
- ***D3.2.9-12*** Evaluate the credibility of a source by examining how experts value the source.

English Language Arts

The inquiry is expected to take an estimated **400 minutes** of class time.

Supporting Question #1: What is research?
Students will learn about what research is and the process one goes through to complete research.
Students will learn the necessary vocabulary for research. Students will discuss the steps of research, what sources/evidence is, and understand credibility and how to assess a source for credibility. Students will also understand the purpose of research and more specifically develop their own understanding of what the purpose for their research project is.
Students will complete a short quiz to demonstrate their understanding of the necessary research terms.

Supporting Question #2: How do we ask effective research questions?
Students will learn the starting point of the research process, which is asking a research question.
Students will learn what makes an effective research question.

The students will need to create a research question for their projects. These will be ones they can reassess and evaluate over the course of the lesson and their year long research project.

Supporting Question #3: How do we effectively document and organize the information we find?
Students will learn effective ways to search their topic to find relevant information.
The students will learn how to paraphrase and take notes on the information they locate.
The students will learn the proper MLA format for citing their sources. Students will learn how to correctly cite for a bibliography and in-text citations.

Summative Performance Task

The students will participate in investigating an overarching research question, in which they will have to find one relevant source. They will document this source using MLA citation format, and take notes on the source using the class voted note taking strategy. After reading the source they will develop more detailed supporting questions to ask in regards to their overarching research question to better guide the research they will be doing on the topic. Students will turn in their overarching research question, MLA citation for their source, notes taken on the source, and 2 additional supporting questions. These will be turned in digitally to assess student learning over the course of this unit.

Taking Informed Action

For taking informed action, the students will share their source, overarching research question, and supporting question with their parents/guardians. This is just one small way to include parents/guardians in their student's learning in the classroom, and for students to demonstrate their learning to their parents/guardians.

Connections to Interdisciplinary Learning Suggestions

Although this inquiry lesson focuses on Nebraska high school English Language Arts standards, there are several other disciplinary standards that connect to the activities. Whenever possible, a teacher should seek to partner with other teachers to create interdisciplinary units of learning. In the spirit of promoting interdisciplinary learning, this guide provides advice below.

- Throughout this lesson, the students practice developing research questions, creating citations, generating search terms, and taking notes on sources. If the students are completing the water quality project that accompanies this curriculum, they can use their project as a research topic in this lesson. In this way, the work they do in English class will support their learning in their science and civics classes. At the same time, any research topic from any discipline would suit the activities

in this lesson. For example, if the students were learning about World War II in their history class at the same time that this lesson was being taught, they could use the activities in this lesson to explore research questions related to World War II.

- One section of this lesson features activities designed to hone students' note-taking skills, especially in relation to independent research. You may be able to collaborate with other teachers to give the students more opportunities to practice skills like taking/organizing notes and paraphrasing.

Staging the Compelling Question (30 minutes)

To begin this inquiry, the class will participate in a Four Corners activity. Each corner of the room will be labeled with numbers that correspond to these slides. The presentation will show various modes of research across the three disciplines (Social Studies, Science, and English). Students will then have to move to the corner of the room they believe goes with a particular discipline. The corners are labeled A, B, C, and D. Corner A is for Social Studies, corner B is for Science, corner C is for English, and corner D is for Other (Art, Math, etc.). When a new slide appears students will move to the corner they think the answer is, after all students have moved then you will prompt each corner to respond to why they chose that particular corner. After one student from each corner responds, you will provide students with the answer and reasoning for why it is the correct answer. During the activity students will have a writing utensil and sticky note to record their responses if they were correct or incorrect. This will be used for students to answer reflection questions on the activity and what their impressions were on their understanding of modes of research.

After the Four Corners activity is complete, the class will come back as a whole to discuss their first impressions. Students may be prompted to respond to the following questions:

1. How did we do?
2. What was surprising about this activity?
3. Did we know more or less about research than we initially thought?

Then students will be asked to respond to this prompt:

> ***What does it mean to be a researcher? What does it look like to conduct research? Write down your responses in complete sentences or bullet points, but be prepared to share your response.***

Students will be given 3 minutes to respond to the prompt, and then will be asked to share what they wrote with an elbow partner. Each group will then be asked to share what they discussed to the whole class. After the class has finished sharing their responses to what they think research is and what they think the components are, the class will complete a whole class definition using the Frayer Model to critically think about what research is.

Additional Tips to Consider:

- Both while the students are writing and while they are sharing with a partner, consider walking around and listening to check their familiarity with research and what it means to be a researcher.

- Consider having your students hand in their writing. This could be as simple as collecting their papers, but you may choose to take a more creative route, such as asking the students to submit their writing via a Google form/survey/doc. The benefits of choosing such an option include 1. Being able to see what the students are writing without looking over their shoulders, 2. being able to highlight specific students' responses as being particularly well-written or intriguing, and 3. being able to give the students access to each other's responses easily. Instead of turning to whoever is nearest, the students could skim each other's responses and choose which ones to talk about, thereby guiding the conversation themselves.

Supporting Question #1 (150 minutes)

Supporting Question and Featured Sources

The first supporting question asks, *"What is research?"* In answering this question, the students will explore the function of research, specifically in relation to their interdisciplinary water quality project. First, they will familiarize themselves with the key vocabulary surrounding the concept of research. Then, they will investigate the research process and develop an understanding of their starting point of reading documents prior to conducting their own research.

In answering this question, students will have an opportunity to demonstrate their understanding of the term 'research' and identify the key components of preparing, conducting, and completing research.

Formative Performance Tasks

Why is research important?

To begin this inquiry, you will need to familiarize the students with key vocabulary surrounding the concept of research. They can either complete guided notes or write their own using this slideshow (keep in mind that this slideshow is not all encompassing and provides students with the basics they need for this particular unit).

The slides for this portion of the lesson start with a bell ringer activity asking students to think about the steps of the research process. Give them time to develop their thinking on their own, as well as some time with an elbow partner to discuss and share their ideas with each other. Students will then have an opportunity to share their ideas with the whole class as the starting point for this portion of the lesson.

To begin, have the students complete the bell ringer activity on slides 27-30 of this slideshow, in which they will be given an opportunity to figure out the steps of the research process through trial and error. Students will be provided 10 minutes to research a given topic and write a brief paragraph over it. As they conduct their research, they must write down the steps of their approach to this task. After time is up, they will be assigned teams (groups of 4-5) to discuss the steps they wrote down. They will have to work as a team to figure out the steps to the research process. The first team to figure it out wins!

Once the bell ringer activity is concluded, the class will move into slides (slides 31-46 in this slideshow) that provide students with some key vocabulary terms and definitions. These terms should not be new to students and can be a review of prior knowledge. If these terms are new, it may be important to discuss

some of these terms further with students. Also, there is a definition of plagiarism included in the slides; this would be a good opportunity to review the school's plagiarism policy with the class. This guided note sheet goes along with the slides and can be printed out or given digitally for students to complete.

The slides provide information on the research process, and a more thorough breakdown of the steps. These steps can be revised and edited to suit the needs of your class. After discussing the steps of research, the slides move to sources and what the purpose of having sources is and the importance of having multiple sources in research.

What is the purpose of research?

Next, the slides (slides 47-57) move into a discussion regarding the purpose of research. Students may not be familiar with the concept of research, and the idea of a year-long research project may be intimidating to them. Students may feel more comfortable learning about various research studies that have an impact on society through a gallery walk activity. You will provide students with 8 articles and reflection questions. The students will get the choice of which 3 studies they would like to look at and be provided this worksheet to record their responses. This activity may help demonstrate the importance and purpose for conducting research and allow students to investigate this idea without being directly told.

Next, continue the dialogue with an open-ended question regarding what students think the purpose of their research is and what they want to accomplish in the year. This discussion could start by giving students 3-5 minutes for personal reflection and writing, then turn and discuss with a partner or table group for another 5 minutes or so, and then bring it back to a whole group discussion to share ideas. You can record responses on the front board, and eventually compile student responses into a shared document or poster for the class to come back to throughout the year.

How would you redefine what research is?

Going back to the first whole class critical thinking discussion about what research is and how it is defined, the students will now generate a new research definition based on the learning completed over the course of the last few days. Before they begin, display the Frayer Model on the board (slide 60) and distribute a copy to each student (either digitally or physically). During their discussion about what research is, the students will work together to fill out this graphic organizer. You may choose to ask them to discuss what they think constitutes *good* research. This will allow students to think more critically about their definition and the key components of research. After the class has discussed and developed a complete definition of research, they will make sure they have all written down the same thing on their Frayer graphic organizers. You may also choose to create a copy to put up in the classroom. This way, students will be able to view their definition daily, and have opportunities to revise it as the year progresses.

Assessment of Student Understanding

To end this part of the inquiry, have students complete a formative assessment testing their understanding of the key vocabulary and concepts for research. Students will need a basic understanding of these concepts moving forward, and thus a formative assessment is necessary to see where their comprehension is at. This quiz can be completed on paper or via Google forms link to quiz here.

Additional tips to consider:

- As an extension activity, have students read and review the school's plagiarism policy, and provide suggestions on how it can be revised to include a section on using Artificial Intelligence (AI) to complete assignments and what students think the punishment should be for using AI.

- This handout might be a good tool to use when reviewing vocabulary. Using a guided note sheet will help students remain accountable for their own learning and note taking. There is space for students to respond to and develop ideas to discuss questions. Another option is to possibly allow students to use the guided note sheet on their formative assessment. This will help students be accountable for taking notes (if they took notes they can use it on the quiz but if they neglected to then they do not have notes to use).

- For the defining research portion of this section, consider finding a way to display this information with students and/or having a way for them to revise and edit it throughout the year. Either create a digital version students can refer to and eventually have an opportunity to revise or have the class create their own poster to display in the classroom. With either option it is important for students to see the work they have done, and be able to display it in a way they can access and view later on.

- For the Frayer Model activity, if there is another vocabulary term students are struggling with or one that needs a more clear and consistent definition the Frayer Model can be revised to support that investigation and reteaching. This document is easy to change and adjust for the needs of any class.

Supporting Question #2 (100 minutes)

Supporting Question and Featured Sources

The second supporting question asks, *"How do we ask effective research questions?"* In answering this question, the students will learn how to develop research questions. First, they will learn the process of developing research questions. Then, they will learn how to identify what makes a research question strong and be able to distinguish between strong and weak questions. Then, the students will investigate their overarch research question and identify what they need in order to answer it, by breaking down the overarching question into smaller ones.

In answering this question, students will develop their understanding of effective questioning. They will also be able to develop and identify their overarching research question for their project. They will also be able to break down the overarch question into smaller ones to focus their research and identify resources to support their research.

Formative Performance Tasks

How do you come up with a research question?

In this portion of the lesson, students will investigate research questions. This activity will start with the following bell ringer question:

How does one come up with research questions? Responses can be complete sentences or bullet points.

The students will use their prior knowledge of research and research topics to answer the bell ringer question. They will have two minutes to develop a written response and ideas related to the question. Afterwards, the students will be encouraged to share their thoughts and ideas. This bell ringer activity is intended to get students thinking about research questions prior to learning more about them.

Then, using these slides, you can dive deeper into what it looks like to develop research questions. To encourage the students to think about their year-long project, they will be asked what they do and do not know about water quality. Everyone will create a T-Chart to develop their thinking. Students will be given 3-5 minutes to write bullet point ideas on water quality. If the students completed "The Importance of Water" (science lesson) and "Claim, Reasoning, Evidence, Warrant (CREW)" (English lesson), they will have already read numerous articles about the subject of water quality; you may prompt them to recall what they learned in these lessons. Once the time is up, students will be encouraged to share their ideas by writing them on the board at the front of the classroom. Every student is required to write one thing, but if time/space allows, they can contribute more if they wish. Once students have contributed some of their ideas to the class, you will read through some of the items on the board, and open the floor for discussion to add to what is already there.

When the discussion comes to a close, you will have students think critically about their T-Chart and the items they have, the knowledge they have gained since the beginning of the year on the topic of water quality. Students will also be tasked with writing a preliminary research question about water quality they would like to explore. As they are writing their research question, they also must think about the process they went through to write their research question. Students will turn and talk with a partner sharing what they wrote for their research question, and what steps they wrote down regarding their process. The class will then share their different ideas on the steps/process of writing and developing a research question. You will try to lead them down the right path, and then provide them this slide. The slide shares a bit about the process one goes through to write and develop a preliminary research question, and some question stems students can use if they are having difficulty writing one on their own.

What makes a research question strong?

Next, the students will need to learn about strong and weak research questions. Rather than just telling them what the differences are, if time allows, you may choose to turn this part of the lesson into a guessing game:

1. Organize the students into teams
2. Display this jumbled list of research questions (or print and cut them out and distribute them to the students):
    - What effect does daily use of TikTok have on the attention span of 16-year-olds at your high school?
    - How will modern technologies change the way of teaching in the future?
    - What are the most effective communication strategies for increasing voter turnout among those aged 18-30?
    - How have economic and political factors affected patterns of experiencing homelessness in the US over the past ten years?
    - Are fruits and vegetables grown on organic farms healthier than those grown on conventional farms?
    - Is a college education worth the investment for students in the social sciences?

    - What should the government do about low voter turnout?
    - Does the US or the UK have a better healthcare system?
    - What is the effect of social media on young adults today?
    - How can driving under the influence be prevented?
3. Have the teams race to figure out which research questions are strong and which are weak. The first team to get them correct wins!

Finally, explain to the students that because there are various ways to pose a research question, it can be difficult to identify strong versus weak research questions. Give them time to reflect on this activity and to hone in on the 'strong' research questions. Ask them to independently develop a list of key components that make a 'strong' research question. Have students respond to the following question:

> ***Based on your prior knowledge and experience from the guessing game activity, what do you think makes a strong research question? Develop a list of what you think are the key components of a strong research question.***

Give students 3 minutes to develop their list and then ask the students to share their list with a partner. Then, they will need to revise their original list to expand on their original ideas. Each pairing will then pick their favorite component that they discussed and write in on the front board to discuss with the class. After each pairing has written their component on the board you will have each group share what they wrote, and why they wrote it on the board. You may take a picture of this and share it digitally with the class or compile what students wrote and put it on a poster board or digital document for students to refer back to in their research process.

During this portion of the lesson the students or even you should hone in on the fact that research questions are difficult to write and that it is hard to distinguish strong research questions from weak ones. Continue the conversation by asking students to identify what makes a research question weak.

Whether or not you choose to do the guessing game with your students, you will need to go through what makes a strong versus weak research question (see slides 79-84 in this slideshow for reference). Students can use these slides to continue to build their knowledge of strong versus weak research questions, and develop notes based on their experience from the activity.

To conclude this portion of the activity, have students go back to their original preliminary research question, and revise it based on the knowledge they have gained from the activity and notes. Students should submit these to you to see where they are at in this process and to get feedback from you. Students can either hand write these or turn them in digitally via Google Classroom.

How do we answer our overarching research question?

Next, the students will learn how to chunk their overarching research question into smaller supporting questions. Students typically have broad research questions that are difficult to answer on their own, but by creating supporting questions, students can narrow down their topic and/or use these supporting questions to help them navigate the research process in more manageable sections.

To start this portion of the lesson, have the students refer back to the T-Chart and preliminary research question(s) to use for today. Have the students take a moment to refresh their memory on what they wrote on the T-Chart, and revisit their research question(s). This information will be helpful for the students to be able to practice writing sub-questions for their overarching research question. Once the

students have had a chance to review what they had written previously, ask them to think about what information they will need to find in order to answer their research question by creating categories for their research topic. Students will be given 3 minutes to write down some questions they still have about the topic and other ideas to help narrow down their research topic into more manageable chunks. After time is up, students will turn and share 3 ideas/questions with their elbow partner, and then you will ask 5 students to share one item they had written down.

Then, you will provide some additional information on what supporting questions are and how they are used in research using these slides (slides 89-92). After the information has been reviewed and discussed regarding how they can use supporting questions and why they are important to strengthen their research, students will have an opportunity to revise the original supporting questions they wrote, and to narrow them down to 2-3 maximum supporting questions. You may choose to have students submit these questions to review them and give students feedback on what they have. This submission could either be hard copy where students physically write down their supporting questions and hand them in, or you could have students submit them electronically on Google Classroom to then be reviewed.

Additional tips to consider:

- For the guessing game activity, there are many different ways to go about the activity and grouping. For instance, you could decide to have the students complete the activity individually, in which case you will have to print and cut more pages of the research questions for each student to have their own set. You can also revise the questions, if they wish, to fit the needs of their class and the topic of study you have decided on for their students.

Supporting Question #3 (100 minutes)

Supporting Question and Featured Sources

The third supporting question asks, *"How do we effectively find, document, and organize the information we find?"* In answering this question, the students will develop and practice methods of finding and organizing research information. First, they will learn how to generate search terms to find relevant sources for their research. Then, the students will learn how to document the sources they find using MLA citations. Then, the students will investigate effective note-taking and organizing strategies for conducting effective research for their yearlong project.

In answering this question, students will be able to generate effective search terms to find relevant information to answer their research question. They will also be able to write complete and accurate MLA citations to document their sources. They will develop their understanding of effective documentation of relevant sources, and identify the best process to use in their research.

Formative Performance Tasks

How to generate search terms?

In this portion of the lesson, students will investigate search terms, and they fill begin by reflecting on the following bell ringer question:

What is a search term? How are search terms used?

Students will be given 2 minutes to think and write a response to the question. After time is up they will turn and discuss with a partner. You will then instruct a handful of students to share what they wrote and/or what was discussed with their partner.

Then, students will have the opportunity to try to generate effective search terms for their research question. Students will be given 2 minutes to develop 2 search terms and/or phrases to find relevant information on their topic. The students will then share the 2 search terms they created with an elbow partner, and they will take their 4 search terms or phrases, and create one new search term or phrase. When each pairing has created their search term or phrase, they will give it to you (hand written, or digitally through Google Classroom or Pear Deck) to share with the whole class. The class will then vote on these search terms/phrases for the top 3.

Then, the students will try out the three search terms to try to find relevant sources. They will then vote on which one yielded the best results on their topic. You may decide to have a class discussion on why these 3 were chosen based on their characteristics and word choice, and which search term actually yielded the best results.

To wrap up this portion, you may provide students with some suggestions on refining their search terms and phrases to yield more relevant results. Please refer to these slides (slides 99).

Citations

In this portion of the lesson, the students will learn about MLA citations. Rather than just telling them what they are and how they are formatted, if time allows, you may choose to turn this part of the lesson into a guessing game.

1. Organize the students into teams
2. Display this jumbled list of citation components (or print and cut them out and distribute them to the students):
    - Title of source.
    - Title of container,
    - Author.
    - Other contributors,
    - Number,
    - Version,
    - Location.
    - Publisher,
    - Publication date,
3. Have the teams race to figure out which order MLA citations go in. The first team to get it correct wins!

Whether or not you choose to do the guessing game with your students, you will need to go through the parts of MLA citations in order and in depth (see slides 104-111 in this slideshow for reference).

Then, explain to the students that because there are small details in creating citations, it can be difficult. Provide them with the following citations, and ask them to correctly identify the source it goes with (each student should write down their own list of answers):

- Last Name, First Name. *Title*. City of Publication, Publisher, Publication Date. →Book
- Author(s). "Title." *Title*, Day Month Year, pages. → Magazine
- Author(s). "Title." *Title*, Volume, Issue, Year, pages. → Scholarly Journal
- Author. "Title." *Title of container*, Publisher, Publication Date, Location.Publisher, Publication date, Location, Date of Access. → Electronic Sources (Web Publications)

Finally, have students complete 2 more citations, individually, using these 2 sources and turn them in you to be reviewed. Students can either be asked to hand write them or turn them in digitally via Google Classroom.

Taking notes on individual sources and organizing those notes

To conclude this portion of the lesson, you may start with the following bell ringer question to get them thinking about reading sources and taking notes:

When reading do you take notes? Why or why not? What if you are reading for research?

Students may respond to the question in bullet points or in complete sentences.

Then, have the students read the 2 articles they previously created citations for. As they read, they should take notes, as well as write down the strategies they used to organize their notes (i.e. using a bullet point system, color coding with highlighters, etc.). Encourage them to be creative!Then, students will share their ideas with the class, and the class will discuss and come up with a single list of effective methods for taking and organizing notes.

Students will then be tasked to find one article associated with their research question using the search terms they generated previously in the lesson. When they find an article they think fits their research topic, they will document and take notes on the source using the strategy the class came up with together. Each student will turn in their notes and a citation of the source to be reviewed and provided feedback on.

Additional tips to consider:

- The articles provided in this section are geared towards water issues. If your class is not focusing on that particular topic, it may be beneficial to find articles that align with the topics discussed in your class to fit a particular unit of study.
- When students are taking notes on a source for the first time, you may provide them with a list of methods and strategies to use and they can pick one from the list you provided. Then the class can share and discuss which strategy worked the best for them.

Summative Performance Task

The students will participate in investigating an overarching research question, in which they will have to find one relevant source. They will document this source using MLA citation format, and take notes on the source using the class voted note taking strategy. After reading the source they will develop more detailed supporting questions to ask in regards to their overarching research question to better guide the research they will be doing on the topic. Students will turn in their overarching research question, MLA citation for their source, notes taken on the source, and 2 additional supporting questions. These will be turned in digitally to assess student learning over the course of this unit.

The assignment description and rubric are linked here. If you are choosing a strategy for students to use you might consider providing them with a graphic organizer. Even if you are letting students decide a strategy to use based on the class discussion earlier in this unit you may want to provide a graphic organizer for them to use. This may be helpful for students who are struggling to find a strategy to use, or have difficulty organizing their ideas into a singular document without direct instruction. Here is an example of a graphic organzier you can use, and adjust it according to the needs of your students.

Taking Informed Action

For taking informed action, the students will share their source, overarching research question, and supporting question with their parents/guardians. This is just one small way to include parents/guardians on their student's learning in the classroom, and for students to demonstrate their learning to their parents/guardians.

Citations

Christensen, Jen. "Nearly half of the tap water in the US is contaminated with 'forever chemicals,' government study finds." *CNN*, 6 July 2023, https://www.cnn.com/2023/07/05/health/pfas-nearly-half-us-tap-water-wellness/index.html. Accessed on 14 July 2023.

DeCuir, Jennifer. "Apple charges ahead into medical research; introduces Research app." *Good Morning America,*14 Nov. 2019, https://www.goodmorningamerica.com/wellness/story/apple-charges-ahead-medical-research-introduces-research-app-66985905. Accessed on 14 July 2023.

Schulz, Marc, and Robert, Waldinger. "An 85-year Harvard study on happiness found the No. 1 retirement challenge that 'no one talks about.'" *CNBC*, 10 March 2023, https://www.cnbc.com/2023/03/10/85-year-harvard-happiness-study-found-the-biggest-downside-of-retirement-that-no-one-talks-about.html. Accessed on 14 July 2023.

Shea, Renee H., et. al. *Foundations of Language & Literature.* Bedford/St. Martin's, 2018.

Kaplan, Sarah. "Floods, fires, and deadly heat are the alarm bells of a planet on the brink." *The Washington Post,* 13 July 2023, https://www.washingtonpost.com/climate-environment/2023/07/12/climate-change-flooding-heat-wave-continue/?utm_campaign=wp_post_most&utm_medium=email&utm_source=newsletter&wpisrc=nl_most&carta-url=https%3A%2F%2Fs2.washingtonpost.com%2Fcar-ln-tr%2F3a905a7%2F64b01ddb68007b638ba0404f%2F63dd0b014faed6188863421f%2F8%2F72%2F64b01ddb68007b638ba0404f. Accessed on 13 July 2023.

Looby, Caitlin. "Study finds persistent bacteria problems at U.S., Great Lakes beaches." *USA Today, 12 July 2023, https://news.yahoo.com/study-finds-persistent-bacteria-problems-091817765.html. Accessed on 14 July 2023.*

Nowell, Cecilia. "Flamin' hot addictions: why is America so hooked on ultra-processed foods?" *The Guardian*, 23 Jun. 2023, https://www.theguardian.com/environment/2023/jun/23/processed-foods-american-addiction. Accessed on 13 July 2023.

Proto, Dominick. "New research reveals sleep disorder may be linked to Parkinson's." *Good Morning America*, 27 April 2022, https://www.goodmorningamerica.com/wellness/story/research-reveals-sleep-disorder-linked-parkinsons-84336156. Accessed on 14 July 2023.

Weintraub Karen. “Should I drink that Diet Coke? What WHO says about the potential heal risks of aspartame.” *USA Today*, 13 July 2023, https://www.usatoday.com/story/news/health/2023/07/13/is-aspartame-bad-for-you/70369944007/. Accessed on 13 July 2023.

Zahn, Max. “Can artificial intelligence help stop mass shootings?: A string of mass shootings has reignited debate about addressing gun violence.” *ABC News*, 2 Feb. 2023, https://abcnews.go.com/Technology/artificial-intelligence-stop-mass-shootings/story?id=96767922. Accessed on 13 July 2023.

Zee, Ginger, and Kenton Gewecke. “Why parts of America are ‘certainly in a water crisis’ and what can be done about it: only 2.5% of Earth’s water is freshwater.” *ABC News*, 19 April 2023, https://abcnews.go.com/US/parts-america-water-crisis/story?id=98484121. Accessed on 13 July 2023.