Truth Detective

Creating Research Questions

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Grade Level	8th – 10th Grade
Subject	English/Language Arts

Essential Question

How do you ask questions to get the best possible answers?

Summary

In this lesson, students will learn about the research process by working together to solve a case by evaluating and connecting evidence. After reflecting on the types of questions they needed to ask to be successful, the class will then learn how to develop high quality research questions and receive peer feedback.

Snapshot

Engage

Students work together in groups to complete a Detective Board that simulates a mini-research project.

Explore

Groups share their Detective Boards and record other groups' findings on their Case Trackers.

Explain

Students learn about levels of questioning and what makes a good research question.

Extend

Students use their new understanding to revise a question from their Case Trackers into a high quality research question through peer feedback.

Evaluate

Each student tests their research question by searching for it online and completing a S-I-T strategy.

Standards

ACT College and Career Readiness Standards - Reading (6-12)

CLR301: Locate simple details at the sentence and paragraph level in somewhat challenging passages
CLR302: Draw simple logical conclusions in somewhat challenging passages

Oklahoma Academic Standards for English Language Arts (Grade 8)

10.6.R.3: Students will evaluate the relevance, reliability, and validity of the information gathered.
10.6.W.1: Students will write research papers and/or texts independently over extended periods of time (e.g., time for research, reflection, and revision) and for shorter timeframes (e.g., a single sitting or a day or two).

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Attachments

- Case Evidence Cards—Truth Detective - Spanish.docx
- Case Evidence Cards—Truth Detective - Spanish.pdf
- Case Evidence Cards—Truth Detective.docx
- Case Evidence Cards—Truth Detective.pdf
- Case Tracker—Truth Detective - Spanish.docx
- Case Tracker—Truth Detective - Spanish.pdf
- Case Tracker—Truth Detective.docx
- Case Tracker—Truth Detective.pdf
- Lesson Slides—Truth Detective.pptx

Materials

- Lesson Slides (attached)
- Case Evidence Cards (attached; one set per group)
- Case Tracker (attached; one per student)
- Legal paper or butcher paper (one piece per group)
- Red markers (one per group)
- Envelopes (one per group)
- Tape
- Sticky notes (one per student)

Preparation

Before you begin this lesson, print and cut out the attached **Case Evidence Cards** for the dossiers. You'll need one set of cards for each group of 2–4 students. The cards contain four different cases. Consider printing the cards on heavy paper or card stock and storing them in envelopes so they can be used again in the future. Once assembled, each of the dossiers should include a case and 9 pieces of potential evidence.

Engage

Use the attached **Lesson Slides** and introduce the lesson by showing **slide 2**. Move through **slide 3–4** and go over the learning objectives and the essential question.

Put students into groups of 2–4. Display **slide 5** and explain to students the Detective Board instructional strategy. Explain that they will be assuming the role of a detective. They will be using pieces of evidence to determine the cause of the problem. It is their job to connect the relevant pieces of evidence. Some pieces of evidence will connect to the central issue directly, some pieces will connect to other pieces of evidence, and some won't connect to the case at all. Pass out a piece of legal paper or butcher paper, a red marker, tape and a dossier to each group. Tell students to not open the dossier yet.

Display **slide 6** and ask them to open their dossiers. Ask the groups to find and tape their case in the middle of their paper, put aside the evidence for now. Ask each group to look at and read the case together. Tell each group to use their red markers to add each of the following to the top of their paper:

- The name of their case: "The Case of the _____"
- 2–3 questions they need to ask to solve the case.
    - At this point, questions should be fairly simple. For example, if the case was "Juan walked to school on a Monday and was surprised to find no other students there," then a question might be "Where have all of the students gone?"

Display **slide 7** and instruct groups to start reviewing and sorting the evidence. Remind students that they can sort the evidence into three categories: evidence that connects directly to the case, evidence that connects to other pieces of evidence to make them stronger, and evidence that doesn't help solve the case at all. Let students know that several of the cases are complex and will have multiple causes/correct answers. Once groups are confident that they have figured out how their evidence connects, tell them to tape the evidence onto their paper and use the red marker to draw arrows to show how the evidence connects to the case and to other pieces of evidence. For the evidence that doesn't connect at all, tape each into the bottom corner of the paper and draw a circle around them with the red marker.

Show **slide 8** to provide students with an example of a detective board.

Digital Detective Board Option

1. Have students navigate to the Digital Detective Board via the short link bit.ly/4lSYTjl.
2. Instruct students to select "Tap to Begin" to enter the game.
3. Assign students one of four cases.
4. Explain to students that they will use the different colored pins to connect pieces of evidence, with one color per evidence strand. Each strand should connect back to the case.
5. They should use the "X" to indicate pieces of evidence that do not connect or support other pieces of evidence.
6. When students are finished connecting the evidence, they can select the save button in the lower right-hand corner to download a PNG of their board. Have them send this PNG, upload it to an LMS, or otherwise turn it in.

Display **slide 9** and explain that groups need to come up with the answer to their question, which should be the solution for the case. Solutions need to be written as at least one complete sentence or more, if necessary. Once they have a final version of their sentence, tell groups to write it prominently on their paper where there is space.

Explore

Display **slide 10.** Pass out the **Case Tracker** handout to each student. Instruct students to answer the questions about their case at the top of the handout. Have each group take turns presenting their case with the class. As groups are sharing, the others should be recording case notes on their handout. Give time between cases for students to come up with questions. If you have multiple groups with the same case, allow all groups with the same case to share before moving on to another case.

Explain

Display **slide 11** and explain that what they worked through was a miniature version of a research project. Move to **slide 12** and explain that the most important step in the research process is developing a high quality research question.

Ask students to turn to the back side of their Case Tracker. Move to **slides 13–15** and review the different levels of questions. Ask students to write something in the corresponding box to help them remember the different levels. This can be definitions, examples, or any other device. Explain that a 1, 2, or 3 doesn't make a question good or bad. All question types are needed to understand something well.

Move to **slide 16** and ask students to look back at the questions they created for the different cases on their Case Tracker. Direct students to put a 1, 2, or 3 next to each question depending on which level it is. Once students have had time, invite a few students to share their results.

Display **slide 17** and explain what research questions are and their purpose. Direct students to use the information on these slides to fill out the Frayer Model on the back of the Case Tracker.

Teacher's Note: Pacing the Lesson

If you have a traditional 45-minute class period, consider finishing the first day here as students complete the Frayer Model. Consider starting the next day by reviewing the Frayer Model, then moving to the extend phase.

Extend

Move to **slide 18** and discuss what makes a good research question. Make sure to pause and clarify if students have questions. Move to **slide 19** and invite students to create a high quality research question. Go over the steps on **slide 20–21** and walk through the example with students. Show **slide 22.** Have students go back to the topics from the Detective Boards and come up with a high quality research question based on one of those topics. Tell students that a good starting place is to take one of the questions they already came up with and turn it into a level 3 research question.

Transition to **slide 23** and introduce the Mingle strategy. Start the music. As the it plays, students should walk about to find a partner. Once they have a partner, they should begin reviewing each other's research questions. Students should exchange papers and complete the research question criteria checklist. If the reviewer finds something missing, they should circle the corresponding checklist item and talk with the question's author about what might be missing. Some things, like whether the question is too broad or narrow, will be subjective. Tell students to listen to their peer reviewer's advice but to keep in mind that they have the final say. Repeat the Mingle one more time to have students find a new partner to peer review. Repeat the peer review and discussion process.

After the peer review, students should go over the feedback for their research question. They should use the feedback to revise their research question and write their final question at the bottom of their page.

Evaluate

Move to **slide 24** and have students get out a computer or a device with internet access. Direct them to a search engine, such as Google or Bing, and instruct them to search their research question exactly as it is worded on their paper. Have them look through three different result options and briefly read the answers they give. Remind students to go to the websites and not just read the AI overview.

Transition to **slide 25** and pass out a sticky note to each student. On their sticky note, guide students though a S-I-T strategy activity. They should record what they found surprising, interesting, and troubling based on their findings. When they are finished, they should place their sticky note on their Case tracker handout and turn it in.

Resources

- K20 Center. (n.d.). Detective board. Strategies. https://learn.k20center.ou.edu/strategy/3530
- K20 Center. (n.d.). Frayer model. Strategies. https://learn.k20center.ou.edu/strategy/126
- K20 Center. (n.d.). Mingle. Strategies. https://learn.k20center.ou.edu/strategy/53
- K20 Center. (n.d.). S-I-T (Surprising, interesting, troubling). Strategies. https://learn.k20center.ou.edu/strategy/926
- K20 Center. (n.d.). *Truth Detective digital detective board* [Game]. https://itch.io/embed-upload/13479269?color=333333