

Lesson Plan

Detective: The Great Sketchbook Mystery

Developed by Ziquan Zhan
University of Pittsburgh, Masters Student Applied Developmental Psychology

Lesson Summary

Students in grades 1-5 will learn about making inferences based on evidence and the importance of presuming goodwill. Students will practice logical reasoning, collaborative problem-solving, and respectful communication to solve a classroom mystery. Students will learn about how to analyze clues, distinguish between different types of evidence, and solve problems without blaming others.

Objective

1. Identify and rank clues based on their helpfulness in solving a problem and verbally explain their reasoning using terms like “observation” or “environment.” (Measured through individual ranking sheets and group discussion observations.)
2. Collaboratively negotiate a group ranking of clues and propose a logical next step (e.g., “check the recycling box”) based on the combined evidence. (Measured through group consensus sheets and spokesperson presentations.)
3. Explain, in age-appropriate terms, why assuming good intentions is important and how an unintentional mistake differs from a mean action. (Measured through responses during the facilitated whole-class discussion.)

Vocabulary

- **Evidence:** Facts or information that can show whether something is true or false.
- **Clue:** A piece of evidence that helps solve a mystery or problem.
- **Inference:** A smart guess you make based on clues and what you already know.
- **Witness:** Someone who sees something happen.
- **Observation:** Something you notice using your senses (sight, hearing, etc.).
- **Statement:** Something someone says about what they did or saw.
- **Presumption of goodwill:** Starting with the idea that people probably didn't mean to do something wrong.
- **Responsibility:** Being accountable for your actions and their results.
- **Coincidence:** Two or more things happening at the same time by chance, not by plan.

Materials

- Core Scenario Statement handout (one per student).
- Set of 5 “Clue” cards (Clues A-E, one set per group).
- Individual Ranking Sheet (one per student).
- Group Consensus Record Sheet (one per group).
- Whiteboard/Blackboard and erasable markers.

Lesson Activity

Teacher Prep

1. Print and prepare the 5 “Clue” cards (one set per group). Clues contain:
 - **Clue A (Witness):** Leo's account of seeing the wind blow the sketchbook off the desk.
 - **Clue B (Connection):** Alex admired Emily's drawings.
 - **Clue C (Environment):** The window was open and windy; a recycling box is in the corner.
 - **Clue D (Action):** Ben cleaned up papers from the floor into the recycling box.
 - **Clue E (Statement):** Alex's account of his own actions.
2. Photocopy the Core Scenario Statement, Individual Ranking Sheets, and Group Consensus Record Sheets.
3. Prepare whiteboard space to list each group’s final ranking and key criteria.

Lesson Tips

- **From the outset**, frame the activity as “collaborative puzzle-solving” and “rational reasoning,” **not** “finding the culprit.” Foster a safe and positive discussion environment by **setting clear norms**: remind students to listen when others speak, use kind words, and that the goal is to solve the puzzle together, not to blame anyone. **You might say**, “We are a team of detectives helping our friend Emily.”
- During individual work, for **younger students** (Grades 1-2), you can modify the task: instead of a written ranking, have them circle the picture or symbol on their sheet that they think is the “best clue.” **For older students** (Grades 3-5), encourage them to jot down brief keywords for their reasoning (e.g., “saw it,” “wind,” “cleaning”) to support accountable thinking.
- During group discussion, if students focus on guessing a classmate’s motives (like Clue B), guide them toward “how to verify or rule out this possibility without hurting the classmate.”
- This activity serves as a practical exercise in Pennsylvania Career Readiness Standards (Analysis, Communication, Collaboration).

Background Information

This activity is designed to build foundational critical thinking and social-emotional skills. The “mystery” is intentionally constructed so that the truth stems from a chain of unintentional oversights and environmental coincidences, not malice. This design allows students to practice evidence-based reasoning while simultaneously learning crucial life lessons about assuming good intentions, the complete dimension of responsibility (intent + outcome), and protecting community trust. The educator’s role is to guide the inquiry toward these dual objectives.

Introduction

- Share with your students: “Today, we’re going to be a classroom detective team! We’ll work together to solve a puzzle using clues, our reasoning skills, and kind communication.”
- Read the **Core Scenario Statement** aloud: “*Emily’s precious sketchbook, full of drawings for the school art show, went missing from her desk after lunch. She’s very upset. Let’s help figure out what happened.*”
- Crucially, frame the activity from the outset as “**collaborative puzzle-solving**” and “**rational reasoning,**” not “**finding the culprit.**”

Instructions

Share with your students that today they will analyze clues, discuss in teams, and reason their way to the most likely solution.

1. **Individual Reading & Ranking (7-10 mins):** Distribute the “Clue” cards and Individual Ranking Sheets. Students read all 5 clues independently. On their sheet, they rank the five clues by “**how helpful they are in finding the sketchbook or figuring out the truth**”, from **most helpful to least helpful**.
2. **Small Group Discussion & Consensus Ranking (15 mins):** In small groups, students take turns sharing personal rankings and primary reasons. The group must then negotiate a **consensus ranking**. They record the final ranking on the Group Consensus Record Sheet and summarize a **key criteria for each ranking** (e.g., “A is a direct witness, so it’s important.”).
3. **Whole Class Sharing & Comparison (10 mins):** Each group’s spokesperson presents their consensus ranking and explains the key criteria. The teacher lists each group’s ranking side-by-side on the board for visual comparison. Guide the class to observe similarities and differences.
4. **Facilitated Whole-Class Discussion (15 mins):** The educator facilitates a discussion using the prepared questions (see Guiding Student Inquiry below), leading to the revelation of the truth and its lessons.

Guiding Student Inquiry

Before Activity

1. If something you really cared about went missing, what would be the first thing you'd do?
2. What makes a clue or piece of information helpful when you're trying to solve a problem?

During Activity

1. Why is this clue more helpful than that one?
2. Is this clue something someone saw, something about the environment, or something someone said?
3. How can we check if this idea is true without jumping to conclusions about someone?
4. What's our best guess about where the sketchbook is, based on these clues?
5. How is our group working together to decide?

After Activity

1. Based on our reasoning, what should we do first? (Check the recycling box!)
2. So, is Ben responsible? Was his action well-intentioned or careless?
3. How is losing a personal sketchbook different from losing an ordinary notebook?

Check for Understanding

The “Clue Weight” Question: Why did some groups focus heavily on “the wind” (C) and “the recycling box” (link of C/D), while others paid more attention to “who liked the book” (B)? Does this show we start our thinking from different points?

The “Evidence Nature” Question: Both Clue A (witness) and Clue E (statement) are things classmates said. Should we treat them exactly the same? Why? (Guide thinking about “direct observation” vs. “personal account”).

The “Presumption of Goodwill” Question: Clue B says Alex admired the drawings. Without proof, can we suspect he might have “taken it” just because he “liked it”? How might this affect Alex? How should a good investigation avoid causing such harm?

The “Action & Responsibility” Question: Based on most groups’ reasoning, what’s the first step? So, is the helper Ben responsible? Was his action well-intentioned (cleaning) or careless (not looking properly)? How do we tell a “mistake” from a “fault”?

The “Emotional Value” Question: How is losing a sketchbook full of personal art different from losing an ordinary homework book? Does it change how urgently we want to help find it? How should we protect and respect each other’s creative work?

Extension Activity Ideas

- **Role-Play:** Students act out short scenes showing an unintentional mistake (like spilling something, misplacing an item) and the respectful way to address it.
- **Classroom Safety Poster:** Create a poster titled “We Are Careful Detectives & Kind Friends” with rules like “Check the facts first,” “Assume it was a mistake,” and “Help find solutions.”
- **Lost and Found Story:** Write or draw a story about a different “lost item” mystery in the school, applying the same reasoning steps.
- **Thank-You Note Craft:** Students make cards thanking someone who helped them after a mistake or accident, focusing on forgiveness and teamwork.

School-to-Home Connection

- **Home “Valuable Things” Talk:** Families discuss what items are personally valuable to each member and how they can all help protect them.

- **“Show & Tell” Help/Apology Plan:** Ask families to work together to create a simple help or apology plan (using drawings or a list) for when a minor misunderstanding happens at home, such as when someone accidentally breaks something or says something hurtful. The plan should be based on the lesson’s principles of assuming good intentions and finding a solution together

Academic Standards

Pennsylvania Career Readiness Standards:

- Standard 13.1 (Career Awareness and Preparation): Students analyze information and make evidence-based inferences to solve a problem.
- Standard 13.3 (Career Retention and Advancement): Students practice effective group interaction, collaboration, and constructive problem-solving within a team, mirroring essential workplace skills.

C3 Framework for Social Studies State Standards:

- D3.1.3-5: Gather relevant information from multiple sources while using the origin, structure, and context to guide the selection.
- D4.3.3-5: Present a summary of arguments and explanations to others, using print and oral technologies.)

Appendix: Student Handout

Core Scenario Description

“Art class is about to begin, and Emily is on the verge of tears. Her favorite sketchbook is missing! It’s filled with her secret artwork for next week’s ‘School Art Show.’ She remembers showing it to her best friend right before lunch and leaving it on her desk. Now, it’s vanished.”

Put them in order, starting with the one that is the most helpful in finding the sketchbook (6) and ending with the one that is the least helpful in finding the sketchbook (1).

	Individual Ranking	Group Ranking
Clue A		
Clue B		
Clue C		
Clue D		
Clue E		

Clue A (Witness): Leo, who sit next to Emily said: “During lunch break, I saw Emily put her sketchbook on the desk and go to the library to return a book. Later, I saw a gust of wind blow it onto the floor.”

Clue B (Connection): Alex, who sits in the front row, is the class’s “little artist.” He really admires Emily’s drawings and asked just yesterday if he could look at her sketchbook more closely, but Emily said to wait until she finished.

Clue C (Environment): The classroom window was open during lunch break, and it was quite windy. There’s a large recycling cardboard box in the cleaning corner with some scrap paper in it.

Clue D (Action): The classroom helper, Ben, did a quick floor clean right after the lunch bell rang. He said he picked up a few pieces of paper from the floor and threw them into that large recycling box in the corner because they looked like scrap paper.

Clue E (Statement): Alex said: “I was in the art room the entire lunch break, helping Teacher Wang sort brushes. Teacher Wang can confirm. I didn’t come back to the classroom at all.”