



How Belief Affects Perception

An Experiential Psychology Demonstration

Course: Psychology / AP Psychology

Grade Level: 10–12

Unit Fit: Sensation & Perception • Cognition

Lesson Type: Experiential Demonstration + Discussion

Time Frame: One class period



LESSON OVERVIEW

In this lesson, students experience firsthand how **prior beliefs shape perception and interpretation**. The teacher presents the **same ambiguous story** to two groups of students with different prior beliefs. Despite hearing identical information, each group interprets the event differently.

The activity demonstrates **top-down processing, schemas, and confirmation bias**, and concludes with a guided debrief connecting belief-driven perception to real-world situations.



LEARNING OBJECTIVES

Students will be able to:

- Explain how beliefs and expectations influence perception
- Distinguish between stimulus and interpretation
- Describe top-down processing using an example
- Identify confirmation bias in real-life situations
- Apply perception concepts beyond the classroom



IMPORTANT TEACHER FRAMING (READ ALOUD)

“This lesson is not about proving whether something supernatural exists.

It is about how people interpret the same information differently based on what they already believe.”

TEACHER INSTRUCTIONS & FACILITATION GUIDE

STEP 1: BELIEF SORTING (5 minutes)

Ask students to **silently** place themselves into one of three groups:

1. Students who believe in ghosts or supernatural experiences
2. Students who are unsure or skeptical
3. Students who do not believe in ghosts

Emphasize:

- No judgment
- No discussion yet
- There are no “right” or “wrong” beliefs

STEP 2: ESTABLISH THE CONTROL GROUP

Ask the **skeptical/unsure group** to remain seated.

Explain:

- They are the **control group**
- Their job is to **observe reactions**
- They should note:
 - Emotional responses
 - Types of explanations offered
 - Differences between groups

STEP 3: PRESENT THE STORY (SCRIPTED)

◆ **STORY SCRIPT (Teacher Reads Verbatim)**

“This is a story reported by an individual recalling an experience from many years ago.”

“As a teenager, this person often walked home late at night along a rural road. At the top of the road was an old cemetery that had been there for generations.”

“One evening, while walking past the cemetery, the person noticed a bright light among the trees. As they got closer, they felt a sudden chill and became intensely anxious.”

“They later reported hearing what sounded like a voice telling them to ‘run home immediately.’ They ran the rest of the way home.”

“Later that night, a severe thunderstorm occurred with heavy rain, lightning, and strong winds.”

“The next morning, the person returned to the area and discovered that lightning had struck a large tree near the road. The tree had fallen across the exact spot where the person had been standing the night before.”

STEP 4: CONDITION A — NON-BELIEVERS

1. Invite **non-believers** into the room
2. Read the story **exactly as written above**
3. Ask:

“What do you think happened?”

Do not challenge responses. Allow brief discussion.

Then ask the group to step back into the hallway.

STEP 5: CONDITION B — BELIEVERS

1. Invite **believers** into the room
2. Read the **exact same story**, word-for-word
3. Ask the **same question**:

“What do you think happened?”

Allow discussion.

STEP 6: CONTROL GROUP OBSERVATION CHECK

Ask the control group:

- Did I tell the same story to both groups?
- What explanations did each group give?
- What differences did you notice in reactions?

Students almost always report:

- Rational or scientific explanations from non-believers
- Supernatural interpretations from believers

DEBRIEF & DISCUSSION (MOST IMPORTANT PART)

GUIDED QUESTIONS

- Did the stimulus change, or did the interpretation change?
- Why did different groups focus on different details?
- Were any students being dishonest—or just interpreting honestly?
- How did prior belief influence perception?

KEY CONCEPTS TO INTRODUCE

- **Top-Down Processing**
- **Schemas**
- **Confirmation Bias**
- **Belief Perseverance**
- **Perception vs Reality**

REAL-WORLD CONNECTIONS

Discuss how belief-driven perception affects:

- Eyewitness testimony
- Social media interpretation
- Political beliefs
- Rumors and misinformation
- First impressions of people



ASSESSMENT (OPTIONAL)

- Participation
- Exit ticket or short reflection:

“Explain how belief influenced perception in this lesson and give one real-life example.”