EdSutra

Teaching guide

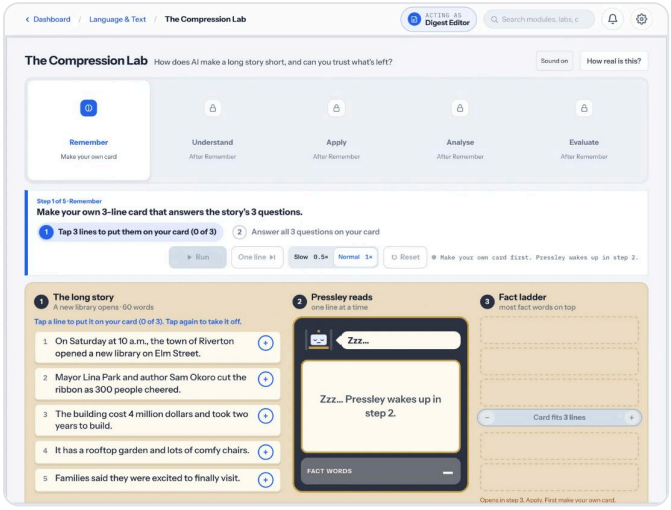
Module 03 · Language & Text · Unit 04 · Stage 2, Capabilities

The Compression Lab

How AI shortens a story without changing what it says

Grades 7–10 | 12 minutes | Role: **Digest Editor**

Grade 7: About age 12–13 · Year 8 in the UK · Class 7 in India



The big idea

A good summary keeps every key fact and invents nothing. Pressley, a digest press, counts the fact words in each line (names, days and times, numbers) and copies the lines with the most onto a small card. Squeeze too hard and a key point falls in the bin. Counting cannot tell which fact matters, so a person checks the card.

The learner's job

Learners are the **Digest Editor** at Bureau of Plain Language · Digest Desk. People will act on your summary without ever reading the original. Their task: cut it short. Then prove you did not change what it says.

By the end, learners can say

- I can explain what a good summary does: answer the key questions, add nothing new
- I can explain how an extractive summarizer chooses lines: it counts fact words
- I can squeeze a story to the shortest card that still keeps every key point
- I can explain why a fact-counting machine can drop the most important fact
- I can judge which summary is safe to send: faithful and complete

Before class

- One computer or tablet for each learner or pair, with EdSutra open (this Module is part of the full EdSutra studio).
- Open the studio once on each device before class, so the Unit still runs if the internet drops.
- Play the Remember and Understand steps yourself, so you know where learners tap and where Pressley's lever is.
- Write the three race questions on the board: Who won? How fast? How many ran? You will check cards against them in Evaluate.
- Best after The Translation Telephone and The Meaning Detector.
- Units open in order, and Module 1 comes first. To start a class here, switch on Open every Unit in Settings → Teachers & parents.

Words to introduce

Summary: A shorter version that keeps the key points and adds nothing new.

Extractive summary: A summary made by copying whole lines from the original.

Fact word: A word Pressley counts: a name, a day or time, or a number.

Key point: A fact the reader must get, such as "Who won?"

Faithful: Adds nothing the original does not say.

Complete: Keeps every key point.

Rewrite (abstractive summary): A summary in new words, which can add or change facts.

Running the lesson 24 minutes

Open 4 min

"People often act on a summary without ever reading the original. What could go wrong if the summary leaves out the one fact that matters?"

Before anyone clicks, ask: if a machine shortened a news story by keeping the sentences with the most names and numbers, would it always keep the most important fact? Take a show of hands and come back to it in Analyze.

Step	What learners do	Ask the class	Listen for
1. Remember 3 min	Learners read the library story and tap three of its five lines onto their own card. The card must answer What opened? Who opened it? What did it cost?	• Which two lines did you leave out, and why? • Did your card add anything the story does not say?	A good card answers every key question and adds nothing new. The rooftop garden and the excited families are filler.
2. Understand 4 min	Learners tap every fact word in line 1 (names, days and times, numbers) and check with Pressley. Then they guess which line goes on top and press Run to watch it count.	• Which words in line 1 are fact words? How many did you find? • Does Pressley know what a library is, or only what it can count?	Line 1 has four fact words. Pressley ranks lines by counting them; it does not know what they mean.
3. Apply 4 min	Learners pull the lever to shrink the card one line at a time, squeeze until a key point falls in the bin, then find the shortest card that keeps all three.	• How many lines did the shortest complete card need? • Which key point fell in the bin first, and why that one?	For the library, three lines keep all three key points. With fewer, the key line with the fewest fact words drops out.
4. Analyze 5 min	On the marathon story, learners guess whether the winner makes a three-line card, run Pressley, and watch "Who won?" fall in the bin. They say why, then give the card more room.	• Why did Pressley keep the weather line and drop the winner? • Look at our show of hands. Were we right about the machine?	The weather line is stuffed with numbers, so it out-counts the winner's line. Pressley counts facts; it cannot tell which one matters.
5. Evaluate 4 min	Learners make their own three-line race card, then choose which card goes to busy readers: Pressley's three lines, Pressley's four, a chatbot's rewrite, or theirs. They back the choice with a fact.	• The chatbot's card is shortest and reads well. Why can't it go out? • Check each card against the three questions on the board. Which pass?	Send a card that is faithful and complete. The chatbot adds "Sunday" and 12,000 runners, which the story never says.

Steps follow Bloom's revised taxonomy, in the order the Unit presents them.

Deepen the thinking

Critical thinking	The chatbot's card sounded smooth and sure, but added two facts. How would you check an AI summary of a long article before you trust it?
AI thinking	Pressley counts names, days and numbers. What other rule could help it find the line that matters most, and how might that rule fail?
Ethics and fairness	A summary of a news story leaves out one side's point of view because it had fewer facts to count. Who is harmed, and who should notice?
Connect to life	When you tell a friend what happened at school today, what do you keep and what do you leave out? How do you decide?

Misconceptions to listen for

"The machine knows which fact matters most."
Pressley counts fact words. In the race it keeps the weather line, full of numbers, and drops the winner.

"A shorter summary is always a better one."
In Apply, one line too few and a key point falls in the bin. The shortest good card is the shortest complete one.

"A smooth AI summary must be right."
The chatbot's race card reads well but invents a day and a runner count. Check every fact against the original.

In real life the card learners see at the end of the Unit

- Search pages and apps now show AI summaries of articles, emails and reviews.
- A TV news roundup squeezes a long story into a minute, so someone chose which key points stay.
- Some study apps turn a chapter into flashcards by pulling out names, dates and numbers. That's extraction.

Try it this week. Summarize a TV story or book chapter in three sentences. Then check: did you keep every key point, and add nothing new?

Watch out for. A shorter summary isn't always better. Trust one only when it invents nothing and keeps every key point; AI rewrites can add facts.

Talk about it. When is reading only the summary fine, and when do you need the whole thing?

Exit ticket

1. What two things make a summary safe to send?

2. How does Pressley decide which lines to keep?

3. Why did the winner of the race fall in the bin?

Going further

The AI Story Canvas Lab lets learners build a choose-your-own-adventure story. Have them write a three-line card for each ending that answers who, what happened and how it ended, and invents nothing. Or use the "Try it this week" activity.