

VIDEO SUMMARY

Learning by Explaining: The Feynman Technique

Resource person: Sprouts | Animated educational media publisher; the individual narrator is not credited on the video page | Curated from Sprouts

Learning by Explaining: The Feynman Technique | Active Learning Strategies | pedagogy

Sprouts turns the popular Feynman technique into a short cycle for testing one's own understanding. Begin by choosing a topic and studying it enough to form a first account. Then explain the idea as though teaching it to someone else, preferably writing and speaking as one would at a board. The first hesitation, undefined term or missing link is useful evidence: return to the source, repair that specific gap and try the complete explanation again. Once the sequence works, simplify the wording and add a diagram or analogy. If the result remains wordy or confusing, repeat the cycle.

The activity makes the learner's current model inspectable. A faculty member can assign a bounded concept, name the intended novice audience and give criteria for an adequate explanation. Students can explain orally, in writing or with a labelled diagram; mark places where they become uncertain; consult trustworthy material; and revise. A peer can ask questions, while the teacher supplies feedback and an accurate debrief.

Simplicity needs a quality check. A fluent explanation may omit conditions, preserve a misconception or use an attractive but misleading analogy. Ask for a worked example, a boundary or counterexample, the evidence behind a claim and an application to a new case. Those prompts reveal whether the learner has usable understanding as well as a memorable performance.

Research directly supports several ingredients in this routine: prompted self-explanation can help learners connect new information with prior knowledge; preparing to teach and actually explaining can improve the organisation and retrieval of studied material; and retrieval practice has a strong evidence base for retention. The packaged sequence itself has less direct evidence as a single universal method. Effects depend on the task, prior knowledge, prompt quality, feedback and what the activity replaces. The video's claim that a simple explanation guarantees deep understanding and long memory is too strong. Check again after a delay and ask the learner to use the idea in a different problem.