

Encoding depth and retrieval routes

Supported GRE teaching and original transfer practice

Identify the evidence

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Rank encoding tasks by depth with levels of processing

Use the overview measurement lesson VI for research inference.

Concepts 1

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Levels of processing (Craik and Lockhart) hold that memory strength follows the depth of encoding, not the intention to learn. Shallow tasks (is the word in capitals?) give weak traces; phonemic tasks (does it rhyme?) are intermediate; semantic tasks (does it fit the sentence?) are deepest. Incidental learners doing deep tasks can out-remember intentional learners doing shallow ones.

Maintenance rehearsal repeats material without change and holds it briefly; elaborative rehearsal links it to meaning, images and prior knowledge, producing durable traces. The generation effect — better memory for answers you produce than words you read — is elaboration at work.

Concepts 2

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Transfer-appropriate processing adds the retrieval side: encoding helps most when it matches the test. Semantic encoding suits semantic tests; phonemic encoding can beat it on rhyme-recognition tests. Depth usually wins because most tests probe meaning, but the match, not depth alone, decides.

Encoding specificity applies the same match principle to context: recall improves when the retrieval environment or state matches encoding. These effects sit beside the interference mechanisms from the earlier memory unit: depth builds the trace, match retrieves it.

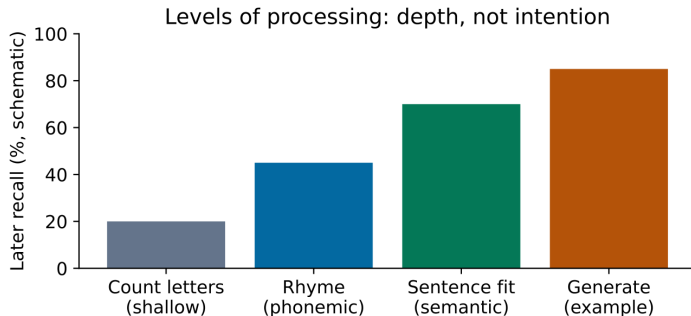
Reason through the worked case

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One group judges meaning and another judges rhyme. On a rhyme-recognition test, the rhyme group performs better. Does this disprove every benefit of semantic encoding?

No. The result is consistent with an encoding–test match. It qualifies a claim that deeper meaning processing always wins. Compare both groups on meaning-based and rhyme-based tests to examine the interaction between encoding and retrieval demand. Keep exposure and time comparable.

Read the reviewed representation



Original schematic for Encoding depth and retrieval routes. Illustrative relationships and numbers are not research results.

Attempt an unfamiliar case

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Design a two-by-two classroom study that distinguishes an encoding advantage from a matching advantage, then predict the informative pattern.

Pause and write the explanation before continuing.

Check the transfer argument

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Cross meaning/rhyme encoding with meaning/rhyme testing. Randomize assignment appropriately, use comparable items and avoid order confounds. A general meaning advantage across tests supports one account; a reversal or stronger same-operation benefit supports matching. Inspect cell means and uncertainty. Do not invent results or claim a classroom study reproduces a named published finding.

Accept a different explanation when its evidence and limits are justified.

Limit the conclusion

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Equating repetition with learning: maintenance rehearsal holds material briefly but builds weak traces, and intention to learn without a deep task adds little.

Original classroom cases are not official questions or personal clinical advice.

Check yourself

Independent retrieval

Semantic study improves one memory task but not another. How could retrieval demands explain the difference?

Write your reasoning before comparing it with the methods and limits taught in this lesson.