

Supplemental Materials
Word Learning Methodology

Table S1

Semantic Features of Word Learning Referents and Phonological Foils for Recognition Task

Item	Colour of body	Body shape	Colour of legs	Number of eyes	Phonological foils
/nɔb/	Purple	Circle	Green	4	bɛnɔb kɔb nɔɸ
/lɜz/	Black	Oval	Red	2	lɜzɛg kɜz lɜp
/doɒnug/	Pink	Circle	Purple	3	nugdoɒ foɒnug doɒnus
/jugɔɪn/	Red	Rectangle	Pink	1	gɔɪnju kugɔɪn jugɔɪɸ
/gɔnəpek/	Dark blue	Square	Yellow	4	pɛknəgɔ fɔnəpek gɔnəpɛl
/gɪtəmoʊk/	Yellow	Oval	Green	1	moʊkɛgɪt nɪtəmoʊk gɪtəmoʊz
/hɔʃətæjɪk/	Green	Rectangle	Yellow	2	jɪkətæhɔʃ hɔʃətæjɪk hɔʃətæjɪm
/gʊfəʃɜgʊs/	Light blue	Square	Red	3	gʊsəʃɜgʊf ɸʊfəʃɜgʊs gʊfəʃɜgʊb

Note. Phonological foils were created by modifying initial phoneme, final phoneme, and syllables (i.e. syllable transposition).

Figure S1

Screenshot of the Eight Referents (Word Learning Stimuli)



Example Script for Narration of Animated Word Learning Tasks

Day 1 (Encoding): Brief script for practice item

The following script is for the practice item only. Please note that specific feedback is provided to the child in response to their performance on each of the outcome measures (i.e., Identification, Naming, Recognition, and Description). When administering the test items, only neutral feedback (e.g., “You’re working well”) is provided.

Training

“There is a creature in the ship who wants to get out and stretch its legs. The creature has a strange name and looks a bit funny.” Item appears from rocket ship.

“This is Poudord. Can you say it?” Await participant response and provide specific feedback as required:

- a) No response: “Try to tell me the name.”
- b) Incorrect response: “This is one is called Poudord.”
- c) Correct response: “Yes, it’s Poudord.”

“Poudord is round... Poudord has yellow legs... It’s time for Poudord to go back in...” Item returns to rocket ship, and then disappears from screen.

Outcome Measures

Identification test

Three items display on screen, including the practice item and two random items (not including any of the eight experimental items). Prompt: “Can you help me find it? Point to Poudord.” Await participant response and provide specific feedback as required:

- a) Correct response: “That’s right.”
- b) Incorrect response: “It’s this one [point].”

Naming

Creature appears on screen. Prompt: “Tell me its name.” Await response and provide neutral feedback.

Items disappears after production.

Description

Screen shows only background to the task (item not visible). Prompt: “I want you to tell me what Poudord looked like. Try to tell me four things.” Await response and implement graduated prompting to train participant to provide a description that includes four features:

- a) Correct response (all four features correctly stated): “That’s right. You told me the colour of its body and legs, how many eyes it had, and its shape.”
- b) Provide corrective feedback for any incorrect description of features: e.g., “It had a square body”; “It had four eyes.”
- c) Any features omitted:
 - I. Level 1 (general): “What else can you tell me?”
 - II. Level 2 (specific, probing for omitted features): e.g., “Tell me its shape”, “Tell me how many eyes it had.”

Recognition

Provide participant with yes/no electronic buttons (coloured green and red, with “yes” and “no” in bold letters). Item reappears on screen. Prompt: “Now we’re going to play a tricky game. I’m going to say the creature’s name – sometimes right, sometimes a bit wrong. Press the green button if it is right; press the red button if it is wrong.”

Participant hears four versions of the target (one correct, three foils, in random order) and uses yes/no buttons to respond to each item. Provide feedback on each item:

- a) Correct response: “That’s right.”
- b) Incorrect response: “Hmm, that wasn’t the right one. Keep listening.”