

IDEAFix: Evaluation Framework for Creative Defixation Prompting in LLMs

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A controlled, compositional framework for studying divergent thinking and defixation prompting in LLMs [1]. We disentangle 3 levers of idea generation that prior work confounds: task formulation, attribute selection, and prompting strategy.

- Task type and attributes significantly shape originality; surprising + negative keywords yield the most novel, rare ideas.
- Simple "think-outside-the-box" prompts beat complex creativity methods (C-K, TRIZ, SCAMPER) at boosting novelty.
- Yet homogenization persists: models from different providers converge on one shared semantic space: an "LLM hivemind."

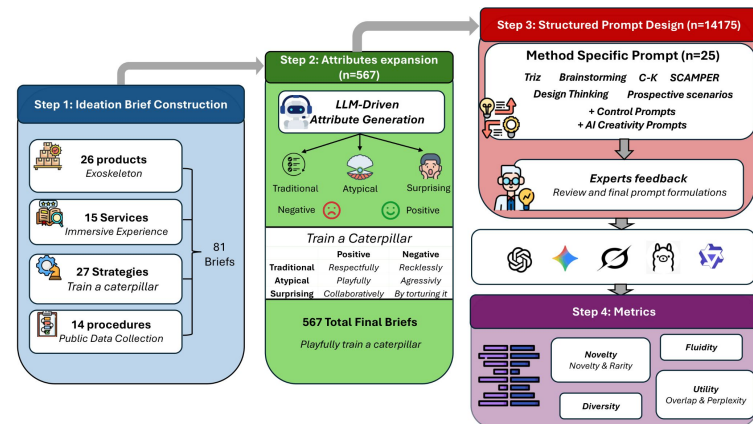


Figure 1: IDEAFix protocol depicting the 3 steps to create the dataset (Brief Construction, Attributes Expansion, Prompt Design) and the 4th step to evaluate generated solutions.

