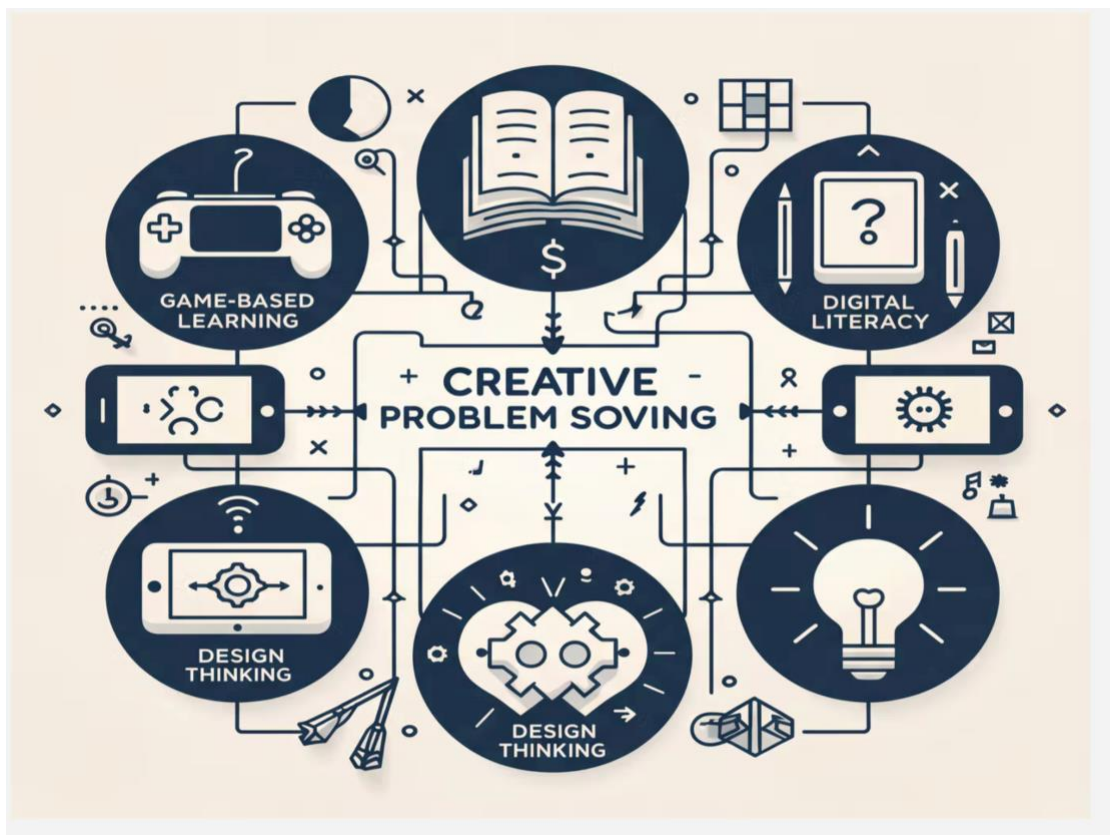


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Title: Creative problem solving, by design: Game-Based Learning, Design Thinking, and Digital Literacy

Creative problem solving, by design: Design Thinking fosters empathy. Game-Based Learning builds decision-making skills. Digital Literacy helps students create and communicate visible evidence of learning.



### Design Thinking tips

#### 1. Start with a bounded challenge, not a big topic.

Ask students to convert “healthcare access” or “climate change” into a solvable slice they can move within a semester: one audience, one setting, one behavior, one constraint.

#### 2. Require interviews, then grade the synthesis.

Have students do a minimum set of interviews of people impacted by the problem (plus one expert), but make the grade hinge on what they do with what they heard: insights, common themes, pain points, and gaps and 'leverage' points where an action or intervention is needed.

**3. Teach a sequence of tools that moves thinking from messy to usable.**

Use 5 Whys to get underneath first answers, a fishbone to organize causes, a journey map to surface friction and decision points, and a mind map to cluster themes into "what matters."

**4. End the cycle with one "How might we...?" and one next step.**

Not five solutions. One focused "How might we...?" question and one prototype that can be tested, improved, or pitched.

**Game-Based Learning tips**

**5. Use game mechanics for judgment, not entertainment.**

Design an activity where students must choose, explain why, anticipate consequences, and revise. The "game" is the structure that makes reasoning visible.

**6. Turn content into a decision pathway.**

Any reading or case becomes: a dilemma, three theory-grounded options, consequences for each option, and one guardrail (equity, trust, well-being) that must not be violated.

**7. Make reflection part of the game loop.**

After the choice, require a short debrief: what evidence mattered, what trade-off they accepted, and what they would do differently next time.

**Multimodal Design tips**

**8. Grade the thinking artifact, not the polish.**

A journey map, fishbone, or storyboard is "thinking you can see." Assess clarity of logic, not graphic design talent.

**9. Use multimodality for instruction and for student creation.**

Model learning with short videos/podcasts/visual prompts, then ask students to respond in formats that match the goal: map, infographic, prototype sketch, short audio, or a simple game concept.

**10. Use AI as a critique tool, not a shortcut.**

Give students a prompt to run through AI, then require them to correct misframing from a human-centered lens and cite what evidence changed the answer. The grade is the correction and reasoning.