

Design Thinking Toolkit for Education

A practical guide for teachers, school leaders, and educator preparation faculty

2025 | The AI & Education Studio CoDesign Lab

Why Design Thinking Matters Now

Design thinking is a human-centered problem-solving approach that starts with understanding the people you are designing for, then moves through cycles of ideation, prototyping, and testing. It has become one of the most powerful frameworks for tackling the complex, ambiguous problems educators face every day.

Whether you are a classroom teacher, school leader, or educator preparation faculty member, this toolkit provides the process, mindsets, and ready-to-use templates you need to start solving real problems through design thinking.

5

Phases in the
DT Process

4

Audiences
Supported

7+

Quick-Start
Templates

The Five Phases of Design Thinking

A human-centered process for solving complex education challenges

Phase 1: Empathize

Listen

Understand people through interviews, observation, and immersion.

Phase 2: Define

Focus

Synthesize insights into a clear, actionable problem statement.

Phase 3: Ideate

Create

Generate a wide range of possible solutions with diverse groups.

Phase 4: Prototype

Build

Build quick, low-fidelity versions of top ideas to learn from.

Phase 5: Test

Learn

Put prototypes in front of real users, observe, and refine.

The Design Thinking Mindset

Core dispositions that drive the design thinking process

Empathy Over Assumption

Core

Ask, observe, and listen rather than assuming what people need.

Bias Toward Action

Core

Build something small and see what happens rather than debating endlessly.

Comfort with Ambiguity

Core

Sit with messy, unclear problems before jumping to answers.

Radical Collaboration

Core

Bring diverse perspectives together: students, teachers, families.

Iterative Learning

Core

Failure is data. Test, learn, and try again with new insight.

Spotlight: Empathize & Define

Phase 1: Empathize

Goal: Deep human understanding
Key Practices:
Empathy interviews (open-ended, 1:1), shadowing users through their day, journey mapping processes, and collecting artifacts that reveal experience. Tip: Talk to outliers, not just the average stakeholder. Ask why five times to surface deeper truths.

Phase 2: Define

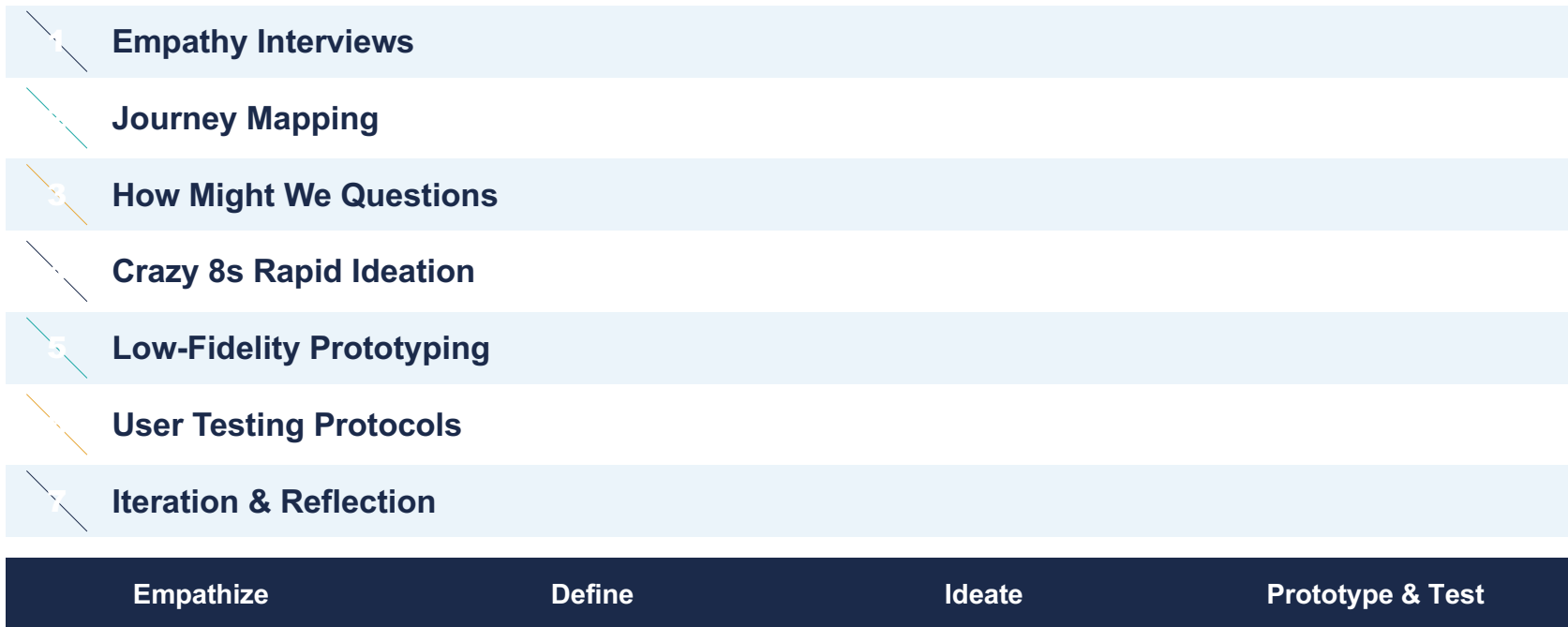
Goal: Clear, actionable problem statement
Craft a POV: [User] needs a way to [need] because [surprising insight]. Cluster interview notes into themes, identify tensions and surprises, and get specific about which people, in what context, and why. Tip: Resist jumping to solutions. A well-defined problem is half the solution.

How does design thinking work in practice?

Real examples from teachers, leaders, and educator preparation programs

Key Techniques Across the Process

Practical methods for each phase of design thinking



Examples in Action: Case Studies

1. Teacher: Redesigning Feedback

Challenge: Ms. Torres spent 15+ hours each weekend grading essays. Students rarely read or applied her feedback.

Solution: Feedback Checkpoints built into the writing process. Students paused, shared with partners, and revised before continuing.

Result: stronger drafts and weekend grading dropped to 4 hours.

2. Leaders: New Teacher Onboarding

Challenge: A district lost 30% of new teachers within three years. The mentoring program focused on compliance, not real-time support.

Solution: First-Year Cohort model with weekly meetings and a shared text thread. Every teacher in the pilot planned to return the following year.

3. Ed Prep: Clinical Experiences

Challenge: Student teachers felt unprepared for classroom reality despite strong coursework. The gap was adaptive expertise, not knowledge.

Solution: Teaching Rehearsal Lab where candidates practiced high-leverage practices with peers. Cooperating teachers reported candidates were noticeably more fluid.

How Design Thinking Helps

For Teachers

Lesson and unit design that starts with student experience. Differentiation grounded in observation. Creative approaches to engagement and absenteeism.

Classroom environment design that reflects what students actually need to thrive.

For School & District Leaders

Strategic planning that is adaptive rather than rigid. Program design informed by lived experience of those affected.

Change management that builds buy-in naturally through inclusive, iterative processes.

For Educator Preparation Faculty

Course and program redesign starting with what new teachers actually need. Clinical experience design that bridges theory and practice.

Partnerships with schools co-designed around mutual benefit rather than university convenience.

Quick-Start Templates

Ready-to-use tools for your first design thinking sprint

30 min

Empathy Interview

Open-ended 1:1 conversation guide with opening, deepening, and closing prompts.

60 min

HMW Workshop

Structured brainstorming session from empathy findings to actionable prototype plans.

1 page

Prototype Canvas

Planning template: idea focus, learning goals, test audience, simplest build, and feedback capture.

5 days

Design Sprint

Monday to Friday sprint plan from empathy interviews through stakeholder share-out.

Start Your Design Thinking Journey

Five steps to begin applying design thinking in your context:

Pick one problem you care about. Choose something specific, not too broad.

Talk to five people who experience the problem. Listen deeply and capture exact quotes.

Define what you learned. Craft a Point of View statement naming a specific user and their core need.

Generate ideas and build something rough. Aim for low-fidelity and fast.

Test it with real users. Observe behavior, ask open questions, and iterate.

“Start Small. Start Now. Pick one problem you care about. Talk to five people who experience it. Define what you learned. Generate ideas. Build something rough. Test it. See what happens.”

- Jody Britten, 2025

Resources & Further Reading

Creative Confidence — Tom & David Kelley

Change by Design — Tim Brown

The Design Thinking Playbook — Lewrick, Link & Leifer

Design Thinking for School Leaders — Gallagher & Thordarson

Launch — Spencer & Juliani

Stanford d.school Virtual Crash Course and Template Library

IDEO's Design Thinking for Educators Toolkit

Thank You

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