

DESIGN THINKING FOR EDUCATORS

Design Thinking for Educators

Description

As educators, you are already designing every single day—whether it's finding new ways to teach content more effectively, using your classroom space differently, developing

new approaches to connecting with parents, or creating new solutions for your school. The methods in this workshop are adapted specifically for you and give you the flexibility to work within your existing constraints

Methodology

The methodology used is a mixture between theoretical training and workshops training based on real-life examples. Different methods enable the participants to develop and create their solutions for their own professional needs and the needs of their students. Practical part contains creating lesson plan, getting and analyzing real information from your institutions and professional experience. There is a complete toolkit used to achieve innovative (and needed) results.

Design Thinking for Educators

RESULTS

This course and the toolkit will offer you new ways to be intentional and collaborative when you are designing new solutions for your classroom, school and community. It hones

your skills and empowers you to create desirable solutions applying the methods and mindsets of design thinking to your work. We have layed out a series of steps that can help you develop new, innovative solutions designed with people at the center. This toolkit can help you create resources for everyday challenges. You will be practicing the skills of design thinking through hands-on activities. This methodology will lead you to increase your confidence in your creative abilities. And, at the end, you are going to be able to develop a sense of empathy for your educational community and come up with ideas for planning courses and a groundbreaking environment that they want and need

Welcome & Course Objectives

By the end of today, you will:

- Understand what Design Thinking is and its educational origins
- Connect design principles to your teaching practice
- Build community through shared professional experiences
- Experience the power of empathy in educational design



What Is Design?

Our approach combines theory with reflection and co-creation, giving you practical tools to implement immediately.



More Than Aesthetics

Design goes far beyond making things look good—it's about intentional problem-solving that considers both functionality and experience.

Purposeful Decisions Everywhere in Education

As educators, you already design constantly: lessons, assessments, classroom spaces, student interactions, and learning experiences.

Good design requires making conscious choices about what problems to solve and how to solve them in ways that center the human experience.

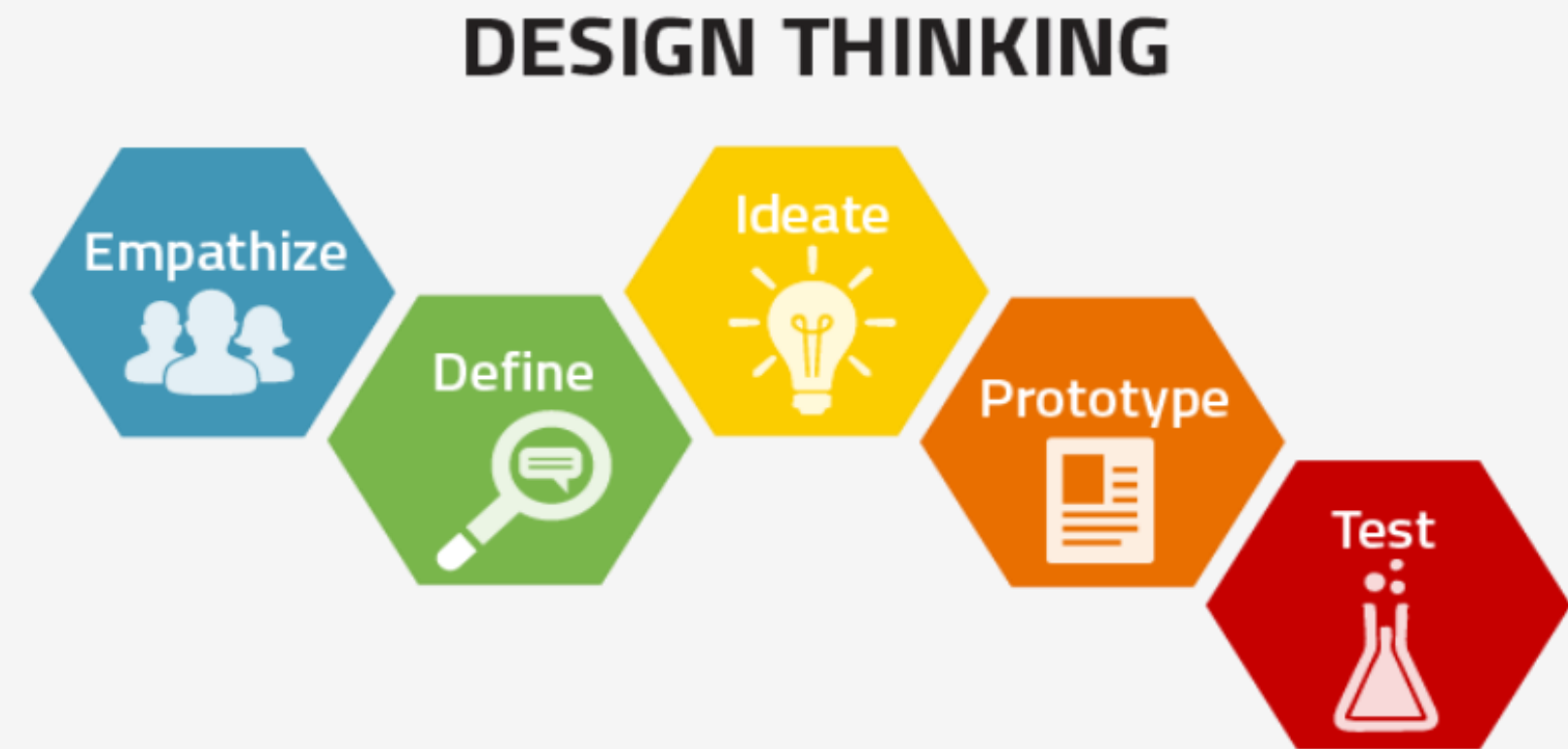
What Is Design Thinking?

Design Thinking is a human-centered, iterative approach to solving complex problems that don't have obvious solutions.

It's both a mindset and a methodology that emphasizes:

- Deep empathy for users' needs
- Creative exploration of multiple possibilities
- Rapid prototyping and testing
- Learning through feedback and iteration

What Is Design Thinking?





What is Design Thinking? | IDEO U



Share

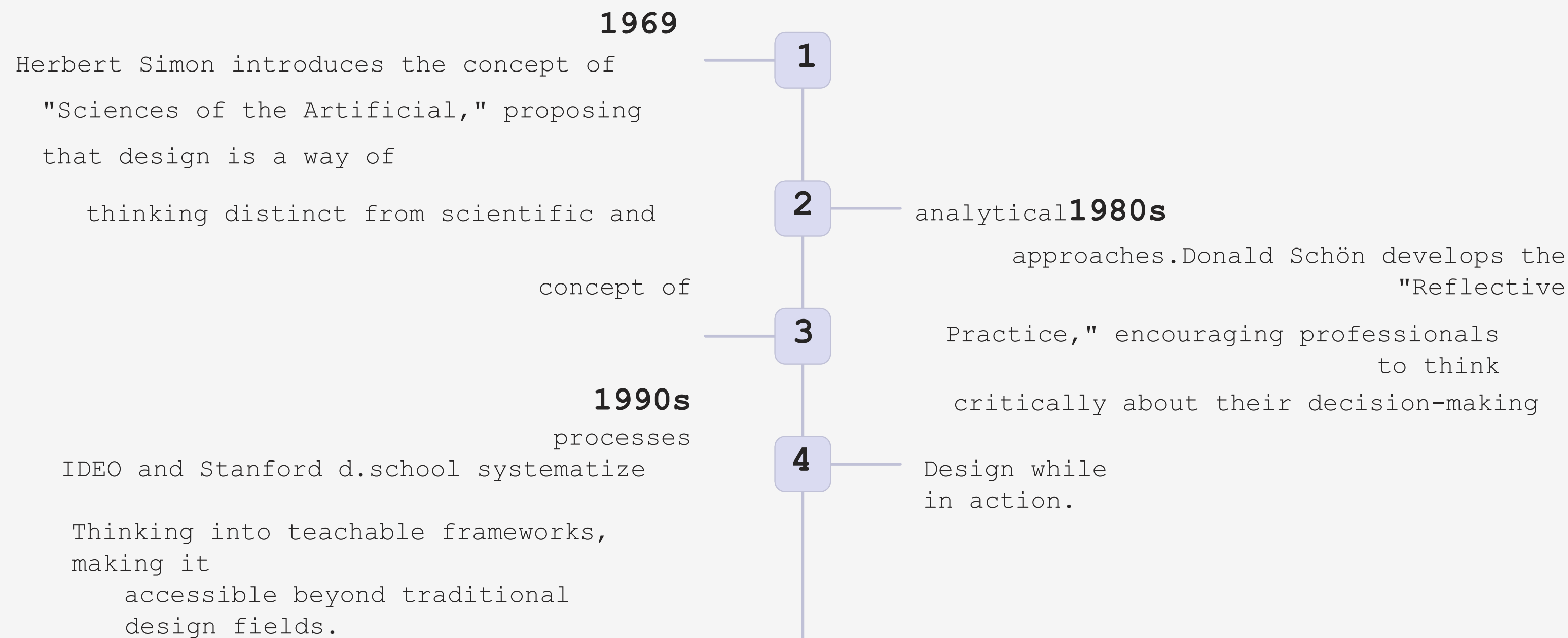


David Kelley

Founder of IDEO & the Stanford d.school

Watch on  YouTube

Historical Evolution of Design Thinking



2000s–Present

Design Thinking expands to education, public services, and social innovation, with educators adapting the process for classroom challenges and curriculum design.

Why Use Design Thinking in Education?

- **Addresses Complex Challenges**

Education faces "wicked problems" with no simple answers—Design Thinking provides structured iteration. approaches to navigate ambiguity.

- **Encourages Experimentation**

Creates a safe space for trying new approaches, failing forward, and learning through

- **Empowers Teachers as Designers**

Shifts mindset from implementing prescribed solutions to

"Design Thinking gave me permission to try becoming intentional creators of learning experiences. new approaches with my students as co-



designers rather than just recipients of my teaching." –Middle School Teacher

Core Mindsets of a Design Thinker

Empathy

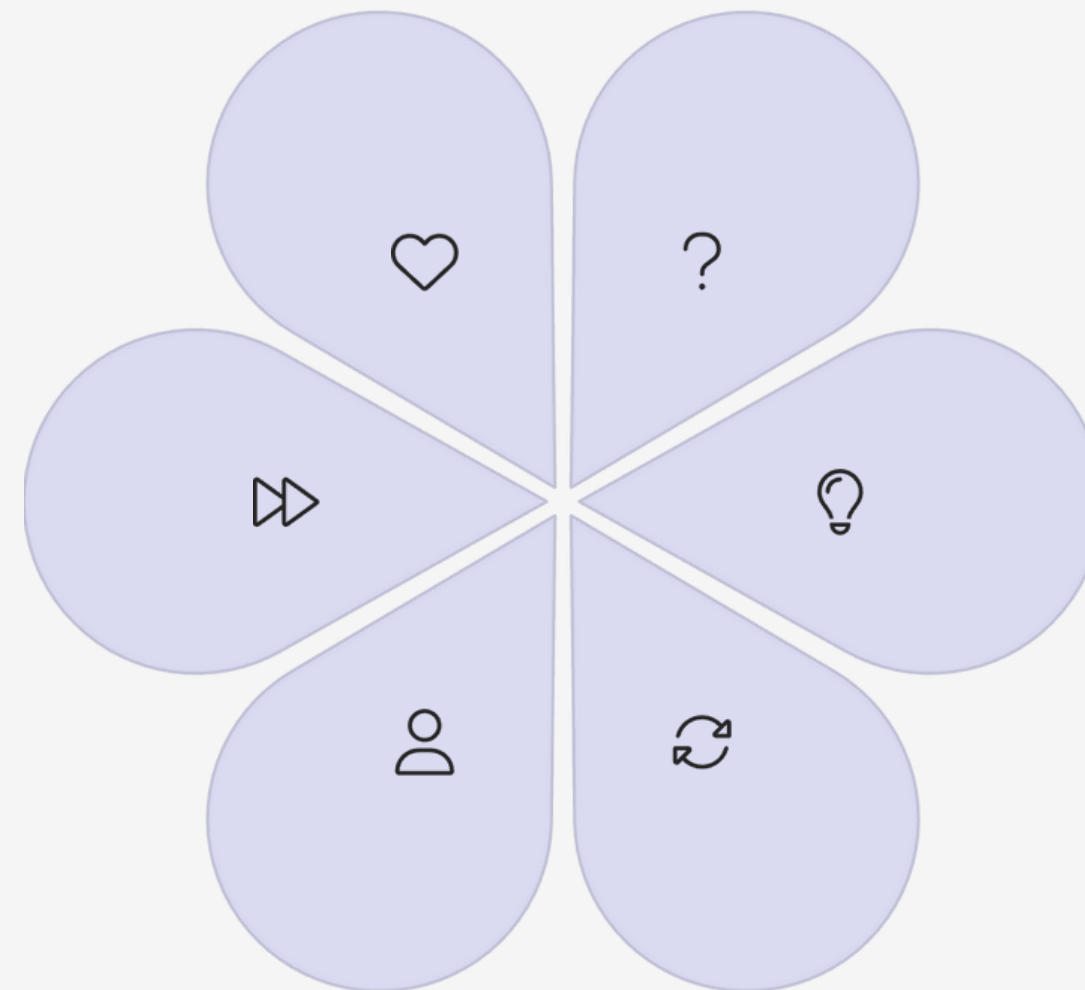
Seeing the world through others' eyes and understanding their needs, motivations, and challenges.

Bias to Action

Learning through doing rather than just thinking or planning.

Collaboration

Valuing diverse perspectives and building on others' ideas.



Curiosity

Asking questions without judgment and staying open to unexpected discoveries.

Optimism

Believing that better solutions are possible and approaching challenges with hope. **Iteration**

Embracing cycles of testing, learning, and refining rather than pursuing perfection.

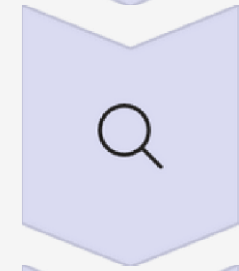
The Design Thinking Process

Stanford's d.school model provides a flexible framework with five interconnected phases:



Empathize

Understand user needs through observation and conversation.



Define

Frame the right problem based on user insights. Remember: This process is nonlinear—you'll often loop back to



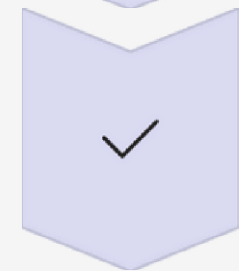
Ideate

Generate diverse solution possibilities.



Prototype

Create simple models to test ideas quickly.



earlier phases as you learn!

Test

Gather feedback and refine your solution.

Activity – Experience Sharing

In pairs (10 minutes):

Share a challenging situation you faced in your classroom or school that required creative problem-solving:

- What was the challenge?
- How did you approach it?
- What worked? What didn't?

In groups (15 minutes):

- What common patterns emerged in your approaches?
- How might Design Thinking have helped?
- What mindsets were present or missing?
-



Reflect on how you already use elements of Design Thinking in your practice, even if you didn't call it that.

Types of Thinking in Problem-Solving

Analytical Thinking

Breaking down complex problems into components, using logic and evidence to understand relationships.

Creative Thinking

Generating novel ideas through divergent thinking, imagination, and making unexpected connections.



Design Thinking

Applying empathy, iteration, and human-centered approaches to create practical solutions for realworld use.

Great educators draw on all three types of thinking, knowing when each approach serves their students best. Design Thinking integrates these modes, using them at different stages of the process.

The Double Diamond Model



The Double Diamond Model

The Double Diamond visualizes how effective design requires both divergent thinking (exploring broadly) and convergent thinking (focusing narrowly) at different stages.

Problem Space (First Diamond)

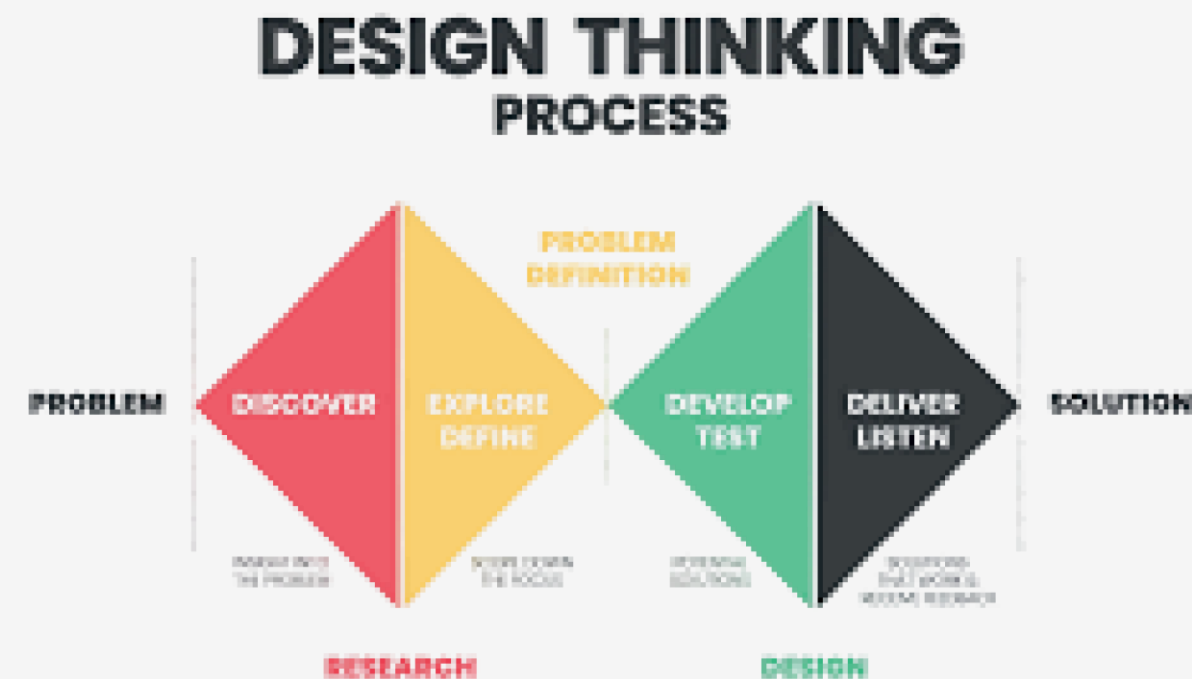
Discover: Explore broadly to understand the challenge from multiple perspectives.

Define: Narrow down to a clear, specific problem statement based on insights.

Solution Space (Second Diamond)

Develop: Generate multiple possible solutions through creative ideation.

Deliver: Refine and implement the most promising solutions.



Context & Discovery: Uncovering the Real Barriers

School Context

Secondary school in a multicultural UK community facing significant homework non-completion issues despite multiple interventions.

Discovery Process

Through observations and in-depth interviews with students and families, we identified several key barriers:

1

Unclear Instructions

Students struggled to understand exactly what was required without teacher guidance.

2

Limited Internet Access

Many families had inconsistent or no internet connectivity at home.

3

After-School Responsibilities

Students often had caregiving duties for siblings or household responsibilities.

Key Insight: The primary barrier wasn't student motivation but rather practical obstacles to completion.

Define & Develop: Reframing the Challenge



Define

We crafted a clear problem statement: "How might we help students complete homework more independently and confidently despite their outside-of-school constraints?"



Develop

The team brainstormed multiple solutions including peer-led homework clubs, visual instructions, and flexible deadlines.



Prototype

Two solutions were selected for testing: visual step-by-step templates and a weekly peer-supported homework café.



Deliver & Impact: Meaningful Results

Implementation Results

40%

Increase

In homework submission rates across all subjects

30%

assignments

Improvement

In classroom engagement observed by teachers

85%

Students

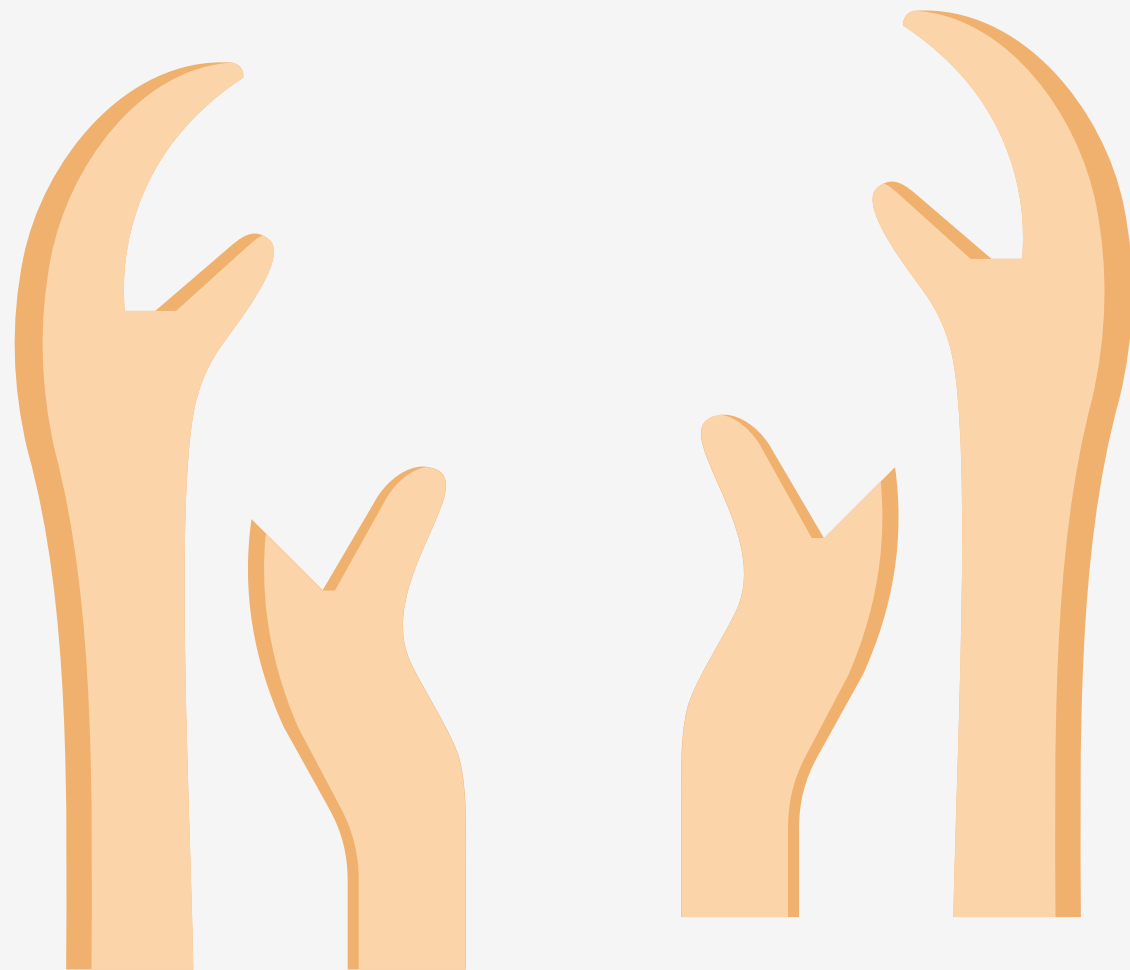
Reported feeling more confident about

Key Takeaways

- Reframing problems reveals non-obvious solutions
- Simple, sustainable changes can have significant impact
- Solutions grounded in empathy address root causes
- Student agency increases when barriers are removed

For educators: The double diamond approach demonstrates that understanding the real context of students' lives is essential for meaningful educational interventions.

Empathy – The Foundation of Design Thinking



"Empathy is not about feeling sorry for someone. It's about understanding their experience so deeply that you can design from their perspective."

Empathy in Design Thinking means:

- Suspending your assumptions and preconceptions
- Observing and engaging with users in their natural context
- Noticing what people say, do, think, and feel
- Identifying tensions between stated needs and observed behaviors



Tools for Empathy in Education



Empathy Interviews

Conduct open-ended conversations with students, parents, and colleagues to understand their experiences, challenges, and aspirations.

Key technique: Ask "why" questions that reveal motivations and values behind behaviors.



Classroom Observation

Watch students interact with learning materials, spaces, and each other without intervening to notice patterns and pain points.

Key technique: Document specific behaviors without immediate interpretation.

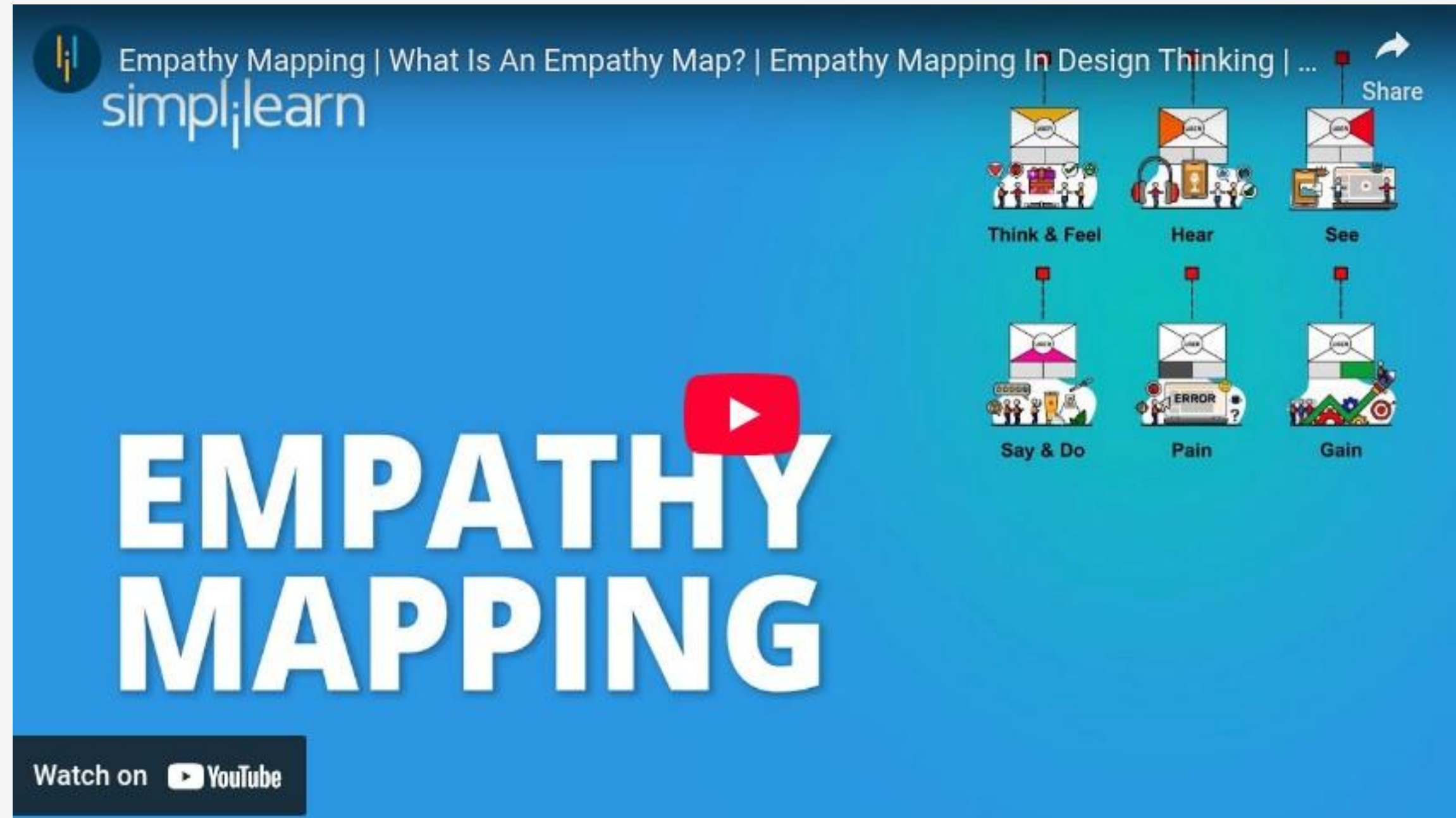


Shadowing & Journey Maps

Follow a student through their entire day to understand the full context of their educational experience.

Key technique: Map the emotional highs and lows of their journey.

Empathy Mapping | What Is An Empathy Map?



Case Study: Empathy Reveals Misunderstood Needs

The Situation: "Unmotivated" Students

Teachers at Lincoln Middle School were frustrated with students who seemed "lazy" and "disengaged" during independent work time. They initially planned to implement stricter consequences for incomplete work.

The Empathy Discovery

Through student interviews and observation, the team discovered many students didn't understand the assignments but were too embarrassed to ask for help. The instructions made sense to teachers but were confusing to students.

The Solution

Teachers redesigned their instruction delivery with visual examples, step-by-step modeling, and anonymous question opportunities. Engagement improved dramatically.



"We thought we had a motivation problem, but we actually had a clarity problem. Empathy completely reframed our understanding."

Activity – Empathy Mapping Practice

Instructions (20 minutes):

1. Choose a specific user (a particular student, parent, or colleague)
2. Complete an empathy map with your team:
3. Share with the group: What surprised you?

What assumptions were challenged?

Says: Direct quotes and statements

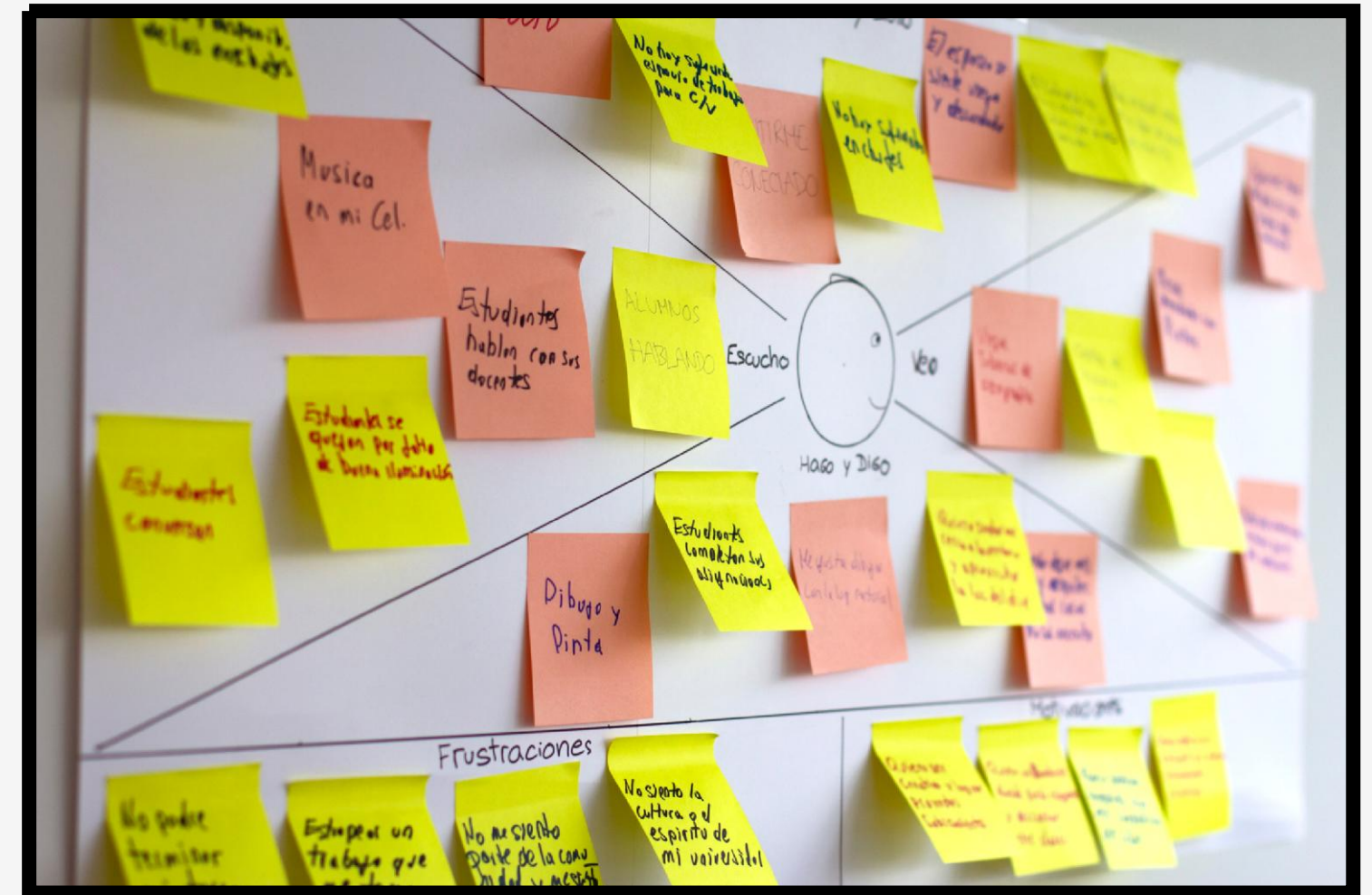
Does: Observable actions and behaviors

Thinks: What might they be thinking?

Feels: Emotions they might experience

Pains: Frustrations, obstacles, fears

Gains: Wants, needs, measures of success



Define – Reframing the Challenge

The Define phase translates empathy insights into a focused challenge statement that guides ideation.

Crafting Point-of-View Statements

An effective POV statement follows this formula:

"How might we help [specific user] achieve [meaningful goal] in [relevant context]?"

Too General

"How might we improve student engagement?"

*Problem: Lacks specificity about which students
what type of engagement*

Just Right

"How might we help struggling readers build confidence during group discussions about assigned texts?"

Specific user, goal, and context that invites multiple solution approaches

Activity – Write Your POV Statement

Instructions (15 minutes):

1. Think of a real challenge in your classroom or school

Based on what you know about the users (students, parents, colleagues), write a POV statement: **"How might we help [user] achieve [goal] in [context]?"**

2. Form trios and share your POV statements

3. Offer feedback: Is it specific enough? Does it allow for multiple solutions? Is it based on empathy insights?



The quality of your problem definition directly impacts the quality of solutions you'll generate.
Invest time in getting this right!

Common Pitfalls in Definition



Jumping to Solutions

Problem: "How might we implement a new reward system?"

Better: "How might we help disengaged students find intrinsic motivation in math class?"



Scope Problems

Too broad: "How might we improve education?"

Too narrow: "How might we use iPads in Tuesday's lesson?"

Just right: "How might we incorporate technology to enhance student collaboration in project-based units?"



System-Focused vs. UserFocused

System-focused: "How might we reduce tardiness rates?"

User-focused: "How might we help students who struggle with morning transitions arrive to first period ready to learn?"

Tool – The "Why Ladder"

The Why Ladder helps you dig deeper to find root causes by repeatedly asking "why" to surface assumptions and underlying challenges.

Example:

Initial problem: "Students aren't completing homework."

Why? "They say they don't have time."

Why don't they have time? "Many have after-school responsibilities or activities."

Why is homework competing with these activities? "Our homework assumes all students have equal time and support at home."

Why do we structure homework this way? "We've always separated class time from practice time."

Reframed POV: "How might we redesign practice opportunities so students with limited time outside school can still master content?"



Divergent Thinking in Design Thinking

- **What is Divergent Thinking?**

Divergent thinking is the ability to generate multiple possibilities before evaluating or selecting the best option. It's about expanding rather than narrowing.

- **When to Use Divergent Thinking:**

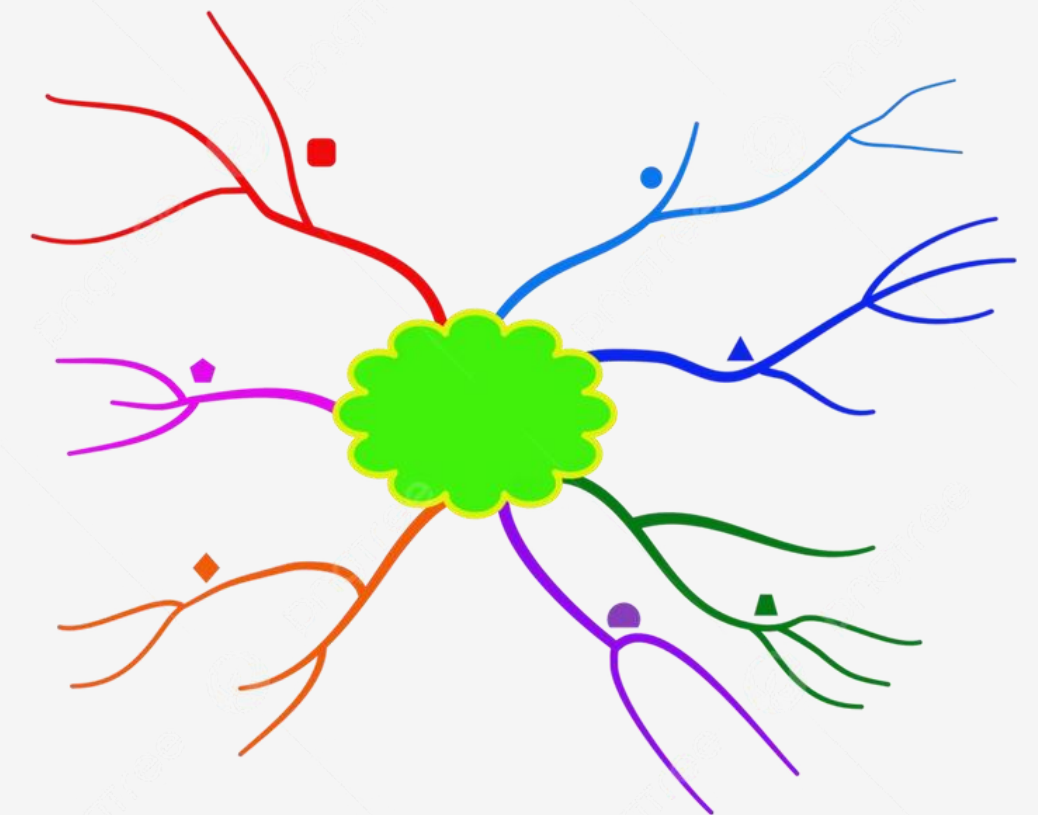
During Empathy: Explore multiple perspectives and sources of information

During Definition: Consider various ways to frame the problem **During**

Ideation: Generate many possible solutions

- **Keys to Successful Divergence:**

- Defer judgment—no idea is "bad" during divergent phases
- • Aim for quantity over quality initially
- 
-



Many educational challenges require breaking out of established patterns of thinking. Divergent thinking helps us see possibilities we might otherwise miss.

Encourage wild ideas that break conventional thinking

Build on others' ideas with "yes, and..." thinking

Reflection – You as a



Where do you already design?

Think about aspects of your educational practice where you already make intentional design decisions:

- Lesson planning and curriculum development
- Classroom environment and seating arrangements
- Assessment strategies and feedback methods
- Relationship-building and community structures
- Digital and physical learning materials



How does DT shift your perspective?

Consider how Design Thinking might transform your approach:

- From solutions-first to understanding-first
- From expert-driven to co-created with users
- From perfection to experimentation
- From isolated to collaborative problem-solving

Designer



What challenges do you face?

Identify recurring challenges that might benefit from Design Thinking:

- Engagement and motivation issues
- Differentiation for diverse learners
- Time and resource constraints
- Communication barriers with stakeholders
- Technology integration difficulties

Key Takeaways:

- Design Thinking combines empathy, creativity, and iteration to solve complex educational challenges
- The process includes five phases: Empathize, Define, Ideate, Prototype, and Test
- Empathy research reveals deeper needs than what's immediately visible
- Well-framed "How Might We" statements guide effective solution-finding
- Both divergent and convergent thinking are essential at different stages
- You are already a designer in many aspects of your educational practice

"Design thinking is a human-centered approach to innovation that draws from the designer's toolkit to integrate the needs of people, the possibilities of technology, and the requirements for success."



— Tim Brown, IDEO