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Design Thinking for kids

"How can parents bring the creative problem-solving process into kids' everyday life?"



Anamika Singla Apr 9, 2020 · 6 min read ★



Image by Kelly Sikkema from Unsplash

DESIGN THINKING- Have you heard about it before? <u>Leading companies in the world</u>, like Apple, Google, are banking on it for innovative solutions, people are writing books on it and everyone around you is <u>probably talking about it</u>.

So what does it have to do with your children?

Well, traditionally our children are taught to 'learn for the test' and are rewarded for the right answers. But the future is not about the right answers. We already have Google for that. The future is about creators, innovators and problem solvers who can adapt and pivot when necessary to flourish in a rapidly changing world. 'Design thinking' is that tool that can help us create those Innovators.

Okay, so let's start from the basics.

What exactly is "Design Thinking"?

At a very basic level <u>Design thinking</u> is a "solution-based" technique to solve a problem. It's a creative process that engages a person in opportunities to empathize and understand user needs, identify/re-define problems, brainstorm ideas and finally test these ideas using prototypes to learn and iterate towards the best solution.

Let me elaborate by giving a simple example:

If you would ask a child to design a car, she will probably go crazy and come up with the coolest cars that ever existed but what if you ask her to design a way to transport people from one place to another? Her solutions can be-unlimited.

You see, when your child starts thinking about solutions to the actual problem rather than redesigning an existing solution- it's innovation at its best and hence very powerful.

'Design Thinking' was popularized by David Kelley, founder of the design firm <u>IDEO</u> and Stanford's <u>d.school</u> and he puts it in a simple statement:

"Design thinking relies on the natural — and coachable — human ability to be intuitive, to recognize patterns, and to construct ideas that are emotionally meaningful as well as functional."

Is Design Thinking only for business and professionals?

It is true that conventionally this tool has been widely used by large businesses to innovate but it has started to show its impact in many other fields like <u>healthcare</u>, <u>education and social enterprise</u>.

Design thinking isn't a subject or a class. It is more of a methodology to solve problems in innovative and creative ways that can be applied anywhere. Importantly, design thinking is just as concerned with 'problem finding' as it is with 'problem-solving'.

This framework is so successful because no matter what problem we are trying to solve, it always keeps the human/ user needs at its core which shapes the solution to the problem at hand.

Hence, it won't be wrong to say that this powerful framework can be very effective for parents in raising lifelong creators.

What is there for children to learn from it? Is it important?

You might wonder why your kids need design thinking skills?

With the rapid advent of new technologies and many more which have not been invented yet, the future remains uncharted. So how can we best prepare our children for this unknown future?

To a greater extent, the answer lies in '<u>Developing a makers mindset</u>' and Design Thinking is a powerful tool to develop that. It will ensure that our children develop the-

- Creative confidence to respond to new challenges.
- Ability to embrace failure, risk-taking and develop persistence.
- Ability to identify and define problems to actionable solutions in innovative ways.
- Ability to learn, unlearn and relearn and 'nothing is too big to solve' attitude.
- Understanding the value of collaboration and feedback.

Image by John Spencer (http://www.spencerauthor.com/)

How can you teach "Design Thinking" in everyday life?

Creativity is actually a tricky thing to inspire. And creativity linked with empathy and innovation is very powerful, yet delicate.

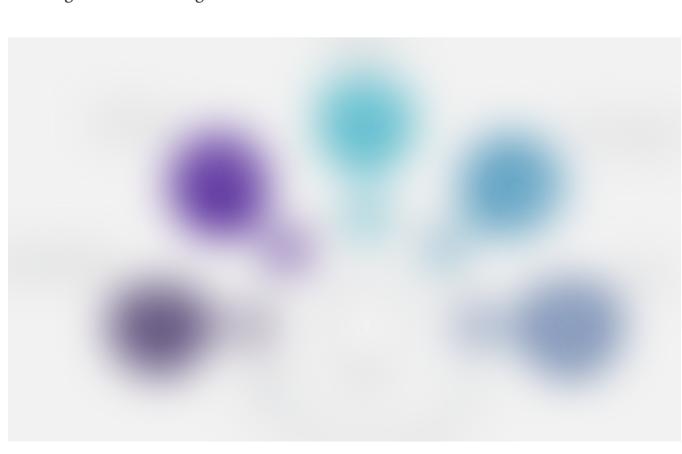
Most of the activities our kids do today are directed towards building a finished product. It takes away focus from the problem they are actually trying to solve and tends to put all the energy into perfecting the solution. That in itself is the core of the problem.

EXAMPLE IDEA TO TRY AT HOME

LEGOS: Usually, the way these blocks are used is with instructions or imagination (free-play) but the 'problem solving' element is often missing from the scenario. What if the next time your child plays with LEGO, you add a DESIGN CHALLENGE twist to it. These prompts can be vague or specific. Example-

"Design something to sit on/ something to hide/ something to carry, etc."

So let's see how we can use the following <u>Framework</u> (image below) to create a "Design thinking" mindset among our children.



The Design Thinking Framework (Source: www.optimation.co.nz)

1. EMPATHIZE

Teaching empathy can be a difficult <u>concept for younger children</u>, especially under 8 years. You can facilitate this by encouraging them to ask more questions, like

- Whom are they designing it for?
- Have them choose their user. It could be a friend from school or even grandma.
- If possible, ask them to have a quick chat with the user and take notes.
- What are the user's needs and pain points?

2. DISCOVER/ DEFINE THE CHALLENGE

It's often after understanding the end-user that you can more clearly define what you are building. In the above case, it can be-

"Design a ladder that my friend Jim can also use to sit on."

3. IDEATE

This is where the fun begins. Ask your kid to be creative and think of as many solutions as possible. 'Crazy ideas' are welcome and sketching it on paper is highly recommended.

4. CREATE / PROTOTYPE

Ask your child to pick one or two ideas and put those LEGOS to use! Let her think out loud what constraints she is facing and note it down. Also, encourage her to look around for existing toys she can use to make her idea work and if needed, pivot based on the available resources.

5. TEST/ SHOW

Once your child is done, have her show it to the friend (if that is not possible, you can facilitate the process yourself) and find out if it works.

Highly encourage them to take notes on some of the parameters like- usability, stability, safety, fun, etc and how they can make it better the next time.

6. LEARN AND REPEAT

This process can be repeated until the end outcome meets the friend's goals.

Some Other Daily "Design Challenges" to Try at Home with Your Kids:

The above Design Thinking framework can be applied to a lot of other daily activities, like:

- **a) Design a room for your grandfather.** Give them empty cardboard, notepad, pens and a call to Grandpa!
- **b) Design a brunch experience for mom.** Let's use brunch as a chance to have your children experiment, try new things and be in tune with their "user".
- c) Design a better grocery store shopping route. Next time you make a trip to the grocery store, ask your children to make a note of your journey within the store, how you pick up items from different aisles, map it and encourage them to ask questions, later based on the observations let them ideate and come up with a different route to try next time in the store. Did it work better?
- d) Design a way to carry water from one point to another without using any kitchen tools. It can be a really fun exercise. Let them choose the medium of a prototype (Play-dough, blocks, trash bag, the list is endless!)

I can keep on adding to the list but I think you get the idea.

The world is full of endless problems waiting to be solved by the curious minds in the most creative and innovative ways!

Thank you for reading,

A fellow Parent.

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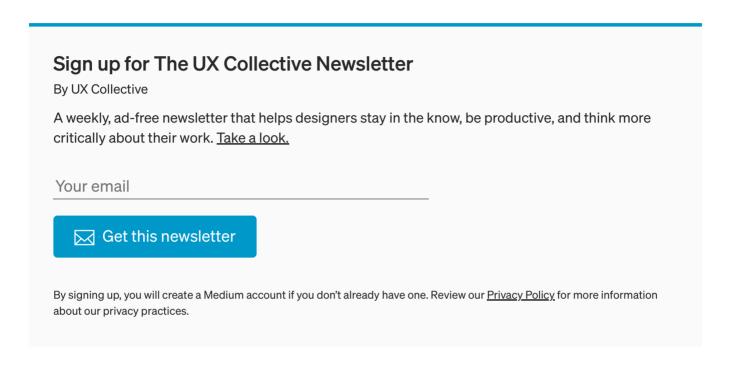
Some other great resources:

- 1. Toolkit for Promoting Empathy: https://startempathy.org/
- 2. Kid-Friendly Design Books: —

<u>The Pocket Universal Principles of Design: 150 Essential Tools for Architects, Artists, Designers, Developers, Engineers, Inventors, and Makers</u>

Tools: Extending Our Reach

3. Designing with kids guidelines: https://childrensdesignguide.org/



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