Design Thinking in Education

In fields of design, there exists a vocabulary, shared mindset, and toolkit of strategies for understanding challenges and building innovative solutions. Education can benefit from adapting these practices to pedagogy, classroom and school design, and policy development.

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HARVARD GRADUATE SCHOOL OF EDUCATION

Explore more online at:
tll.gse.harvard.edu/design-thinking

What is Design Thinking?

Design Thinking is an approach.

First and foremost, Design Thinking is a mindset and approach to learning, collaboration, and problem solving. Traditional academic teaching and learning is typically analytical and focused. Design Thinking encourages learners to take an inquiry stance, think divergently, and develop reflexivity. The approach affirms empathy, curiosity, constructiveness, and continuous iteration.

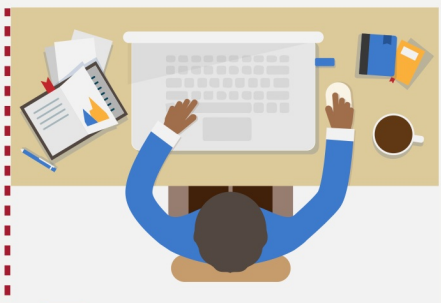
Design Thinking is a process.

The design process is a structured approach to identifying challenges, gathering information, generating potential solutions, refining ideas, and testing solutions. The process is circular by nature and demands iteration. Each stage in the process should be revisited and invoked throughout a learning experience to encourage experimentation, solution feasibility, and reflection. (Ineta, 2014)

Design Steps

1. Discover
2. Interpret
3. Ideate
4. Prototype
5. Test

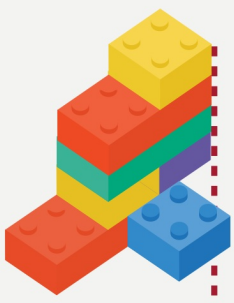
Repeat!



Research shows...

Learners moving through a design cycle exhibit higher-order thinking skills than those in more traditional learning activities. (Razzouk, 2012)

What does it look like?



Design Thinking is active.

Design-based projects and curricula empower cross-disciplinary teams to explore new ideas, visit relevant people and places, and build and test physical solutions. Design Thinking enables highly collaborative activities in and outside the classroom. Students are directly engaged in information gathering, knowledge generation, communication, and presentation.

Design Thinking is versatile.

Design Thinking remains equally impactful at the activity, project, course, or program scale. The design process can be employed in its entirety over several months or as a component of another methodology. Design Thinking can be explored directly as an approach or in pursuit of other academic or collaborative work. The process also works well with external subjects or internally within the classroom setting. (Welsh, 2013)

How do I get started?

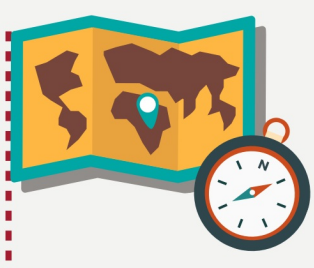
Explore an activity (or two).

There are dozens of ready-made activities, workbooks, and curricular guides available online. We suggest starting with Stanford's d.school resources, the IDEO 'Design Thinking for Educators' toolkit, and the Business Innovation Factory's 'Teachers Design for Education' website.

Collaborate with the TLL.

The Teaching and Learning Lab is a valuable resource for faculty when working through what Design Thinking can look like in a variety of HGSE contexts. Beyond course and project design consultation, we have complete sets of physical resources available for check-out, including brainstorming and prototyping kits.

Contact brandon_pousley@gse.harvard.edu to learn more about Design Thinking at HGSE.



Sources

Razzouk, R., & Shute, V. (2012). What Is Design Thinking and Why Is It Important? Review of Educational Research, 330-348.

Luka, Ineta (2014). Design Thinking in Pedagogy. Journal of Education Culture and Society, No. 2, 63-74.

Welsh, M. Ann, & Dehler, Gordon E. (2013). Combining Critical Reflection and Design Thinking to Develop Integrative Learners. Journal of Management Education, Vol. 37, 771-802.

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