

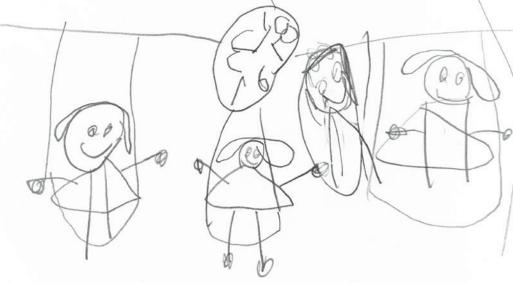


In her second year of teaching at Peck, Anna Kimtis is an energetic advocate for introducing design thinking, student-centered teaching, and STEAM concepts to early education. While also serving as a fourth grade Associate Teacher, she oversees Peck's Makerspace program for kindergarten and first grade with Lower School Technology Integrator Jen Garvey.



The day I graduated public high school in Albuquerque, New Mexico, I was sitting with 500 other students who were more than ready to escape school. We collectively hoped the days of memorizing facts for tests, reading textbooks, and sitting through lectures were over. I actually enjoyed school—though, I know deep down it was because I had learned to like pleasing teachers by providing them the "one right answer" they seemed to expect. Many of my classmates didn't like school, and were disengaged and apathetic about learning.

I saw my entry into adulthood as the beginning of a more authentic education, full of challenges more complex than a textbook or a multiplechoice test. I didn't feel at all prepared, but I did feel proud to be entrusted for the first time to



Kindergarten students created this prototype as a solution to the playground problem, "everyone wants a swing."

make my own decisions and mistakes. I could try things out; learn what worked, and what didn't.

I still wonder what it would have been like for my classmates and me, if we had been entrusted with the ability to try—even to try and fail—more in our K-12 educations.

Today, educators have learned how to better prepare their students for an unknown future. They are supplanting the old educational paradigm of the "one right answer" with a flexible, engaging, and meaningful process encouraging students to discover, do, and grow. These practices encourage students to think for themselves and solve their own problems. One of the best ways to teach those skills is using design thinking.

Even our youngest learners can benefit from the principles of this thoughtful investigative process. At The Peck School, our kindergartners are already engaged in the act of design thinking.



## **Early Learning** with Design Thinking

Design thinking—a method for engaging with complex problems that don't have one clear solution—is crucial to early childhood development. It is an active, empathic process that students can use to identify, ponder, and solve problems through iterations of trial and reflection, both in the classroom and in the real world as they grow throughout childhood.

An example of design thinking in action happening during the early years at Peck revolves around our kindergarten and first grade Makerspace. In a recent project, Kindergartners interviewed their homeroom teachers about problems they have in their classrooms, relying on their empathy and active listening skills to identify how they want to help. The students then chose a problem their teacher has and worked through the design process to solve it—using tools in the Makerspace to build a solution. For example, if a teacher has trouble with pencils falling out of desks, a student could build a better way to hold pencils. If their first design doesn't keep all the pencils from falling, they will reflect on why it didn't work, and what they could do to improve it. Then students will return to planning, creating, and testing to refine the solution.

Kindergarten Problems

> paper towels on bathroom Floor
> pencils with no erasers

> disappearing pencils -> . everyone wants a swing -. ice packs +bandaids aren't outside > hard to open juice











## Design thinking is a powerful process for changing a child's mindset for growth. It:

Helps children find collaborative solutions to problems, instead of waiting to be told the answer.

They become more autonomous thinkers and doers, who have ownership over their education.

Encourages children to take risks, and to learn from failures. In the old paradigm of education, it was uncommon to be granted a chance to go back and try again. This often causes children to attach their self-worth with the idea of perfection, and discourages risk taking. Design thinking encourages failure as a path to growth, and increases a child's confidence and resilience in the face of challenges.

**Builds empathy**. Solving problems for others allows children to actively practice putting others' needs before their own. In order to solve a problem they have to ask good questions and truly listen to answers, in order to

understand the needs and viewpoints of their users.
Working through and completing projects can even help children feel more closely connected to their users, and their community. Helping students stretch their understanding of how others think and feel is a valuable life skill, and an important part of our mission at Peck as we foster the child's whole development.





## Design thinking can be a framework for lifelong problem solving,

as it allows for deep engagement and meaningful connections. When it is time for our Peck students to graduate, they will not say that the challenges of life are about to begin. Rather, they will be able to speak intelligently about the challenges they have faced with a confidence that they have the skills they need to change the world.