



The design-thinking approach is being employed in schools across the country as a pedagogy for students and educators wanting to take a human-centered approach to problem-solving ([see our recent post on the subject](#)). Here, two teachers share their own experiences with using design thinking to help students develop empathy and improve student engagement.

By Mary Ruskey and Lori Aument

For the last several years, “Design Thinking” has been a buzzword often thrown around in business communities. And most recently, it is being implemented more and more in education.

But what is Design Thinking? According to Tim Brown, President and CEO of [IDEO](#) (one of the first companies to embrace Design Thinking), it is defined as: “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 business success.” The methodology includes five steps:

1. **Discover** – What is the problem?
2. **Define** – How do I define the problem?
3. **Ideate** – How could I solve the problem?
4. **Prototype** – How do I execute my idea?
5. **Test** – How do I experiment and evolve my idea?

While this fairly new method got its start in business, as educators we have seen a real desire and need for it in schools as well. This is especially true as we work to create learning environments that teach students to have empathy and be productive and engaged members of their community.

After learning about Design Thinking, we thought the method would naturally fit into the curriculum for the business course we teach to 10th- and 11th-graders at [Mercy Career & Technical High School](#) in North Philadelphia. We chose to introduce our students to Design Thinking because of its focus on empathy and its ability to teach students how to practically apply the skills they were learning in the classroom to a real-world situation. It was our hope that this process would increase student engagement, boost their critical thinking and empower them to give back to their community.

We first introduced Design Thinking to our students in September 2015 as a way for them to rethink how they approached the business plan project we ask them to complete each year. The project, which we named [IMPACT Philly](#), tasks students with identifying a problem that the Philadelphia community currently faces and coming up with a solution to the problem using Design Thinking. Rather than identify a problem without leaving the classroom and fully understanding its impact, students are required to talk with community members and ask them what problems and issues they see and experience in Philadelphia.

An important aspect of Design Thinking is the need to constantly test and evolve your idea and your prototype. With the help of our local volunteer partners, including Philadelphia University, [Uplift Solutions](#) and [Project H.O.M.E.](#), students are able to develop, test and rework their plans. When they hit an unforeseen roadblock, instead of giving up, they learn how to come up with alternate solutions. Using this process, students learn to be flexible and adaptable. In the real world, it's okay to fail, pick yourself back up and try again. Design Thinking teaches students early on how to tackle these issues in a much more realistic way.

Now, two years after we first began, it's safe to say that the project has far exceeded our expectations. In our first year facilitating the project, we found the students' presentation scores from outside judges increased by 30 percent from their mid-year review to their final presentation.

This year, the 10th-grade students focused on finding a way to redirect the path towards violence for at-risk preteens in Philadelphia, while the 11th-grade students were able to choose their own cause. Projects this year include developing an autism awareness program for middle school students, raising funds for cancer research, providing healthy and sustainable food for urban healthy food deserts, and providing teens at community centers with anti-stress kits.

The students have not only received the emotional fulfillment that they are making a difference in their community, but they have also been nationally recognized for their work. Three teams competed in the University of Delaware's Diamond Challenge Social Venture Competition, each one making it to the Philadelphia Regional Round. One student team went on to place in the top 10 overall, winning \$1,000 in startup funding.

In just the last two years, we've noticed a significant improvement since transitioning from the more traditional business curriculum we've used in the past to one that incorporates Design Thinking. As curriculums across the U.S. continue to evolve, we encourage our fellow educators to consider using Design Thinking to teach students how to utilize empathy to creatively solve problems.

For more on Design Thinking and more school examples, see:

- [Powerful Learning Experiences at the Intersection of Big Data and Big Empathy](#)
- [An Innovative K-8 Human-Centered Approach at Design39](#)
- [Rethinking Middle School with Design Thinking at Vista Innovation & Design Academy](#)

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