DESIGN THINKING IN DEL MAR UNION SCHOOL DISTRICT

Design Thinking is a set of skills that prepares students to solve large, complex, cross-curricular, real-world problems by teaching them effective ways of learning and collaborating. It uses a process, made up of discrete stages, for creating innovative solutions.

EMPATHY

Objective: "Seek to Understand" in order to see a problem or need from multiple perspectives.

A first step toward building empathy includes the skills of observing and actively listening. Much can be learned through observation, which includes listening with our eyes, ears, and heart. Often people will say one thing, but a keen observer will find that actually the behavior is different. Active listening and curiosity are practiced and enhanced through direct lessons and extensive practice. Students become proficient interviewers who recognize the power of beginning questions with the word "Why."

In addition to conducting interviews, students will identify experts and perform online research to learn new information, locate resources, and answer questions. After collecting information and immersing themselves in the experiences of a user, students develop a deeper understanding that can lead to key insights.

DEFINE

Objective: Determine a clear problem or need that is broad enough to allow for innovation, yet narrow enough to allow for success.

Finding opportunities to engage in design challenges often comes from noticing problems. By focusing on particular user types and their needs, along with information gleaned through observations, interviews, and research, students will define a problem broad enough to explore new thinking and narrow enough to make the topic manageable. Solving even a small part of a large issue is worth the effort. In order to frame the problem optimistically and as a possibility, it is important to rewrite a problem statement into a "How might we" question. Additionally, developing a needs statement supports students with identifying the underlying problem.

IDEATE

Objective: Effective brainstorming supports individuals and teams with "turning off their judging brains" and increasing the fluency of ideas.

Brainstorming is a set of skills as well as a mindset. Students benefit from exposure to different methods of analyzing and making decisions. Brainstorming is most effective when opportunities to diverge and converge thoughts are provided. Keep in mind that the goal isn't the perfect idea. It's lots of ideas, collaboration, and openness to wild solutions.

When brainstorming, consider the following norms in order to maintain a generative mindset: Defer judgment; Encourage wild ideas; Build on the ideas of others; Stay focused on the topic; One conversation at a time; Be visual; Go for quantity.

PROTOTYPE

Objective: Experimentation brings ideas to life. Building prototypes means making ideas tangible in order to share them with other people.

The Design Thinking process embodies a "bias towards action." By making representations of ideas, problems can be identified and resolved early in the design cycle. Tangible objects or simulated experiences allow students to obtain more informed feedback from users before committing the time and resources to a final version.

TEST/FEEDBACK

Objective: Sharing prototypes with others to see what really matters to people in order to further improve and refine an idea.

Seeking feedback from users is a key aspect of the Design Thinking process. There are many factors that go into a person's mindset of "not knowing" in order to gather both positive and negative feedback to improve their solutions. Experimentation as well as failures are valued for their information and because they contribute to future successes.
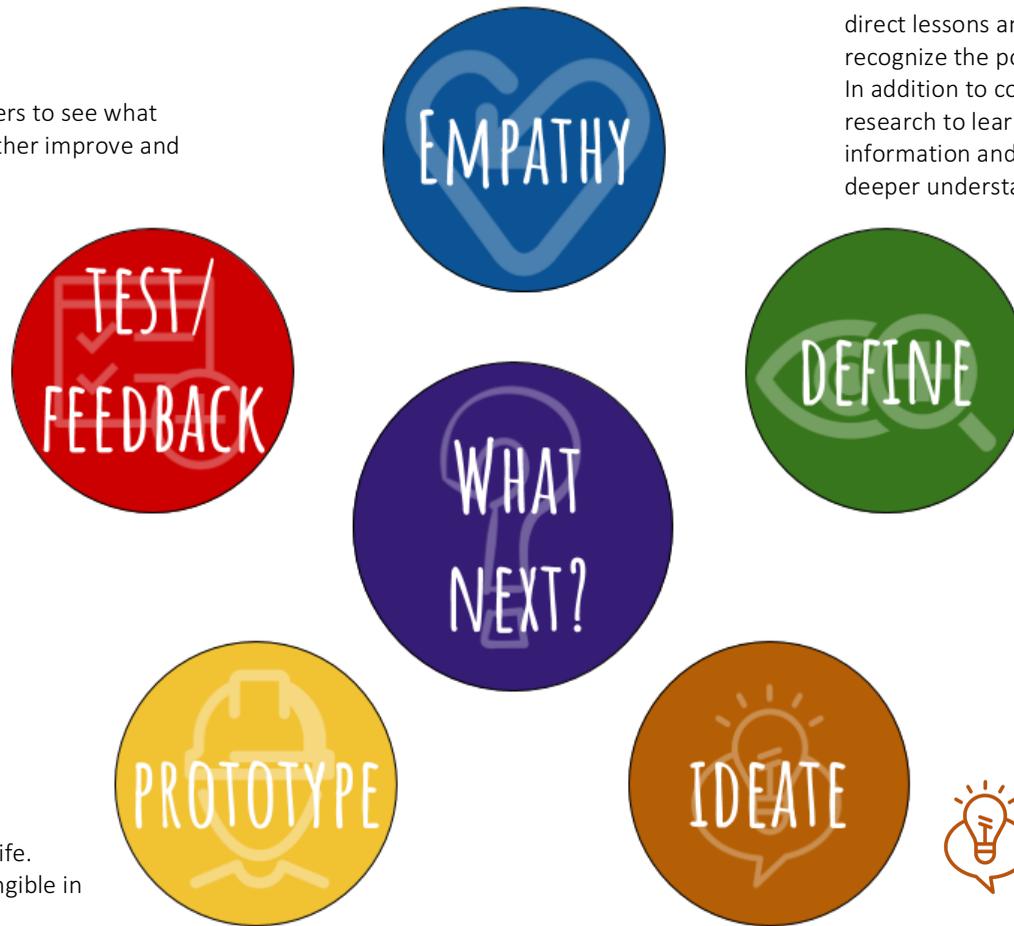
Students evaluate all of the feedback they have obtained about their prototypes. Combining this information with additional research and brainstorming, they decide how best to proceed. Should we change our prototype? Have we answered the key questions? Do we need more information? Do we need more ideas? Should we scrap this and start over?