Design Thinking Startup Kit

How to Create a Design Thinking Event at Your High School

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Summary

This document is a guide for an Event Organizer to introduce high school students, parents and faculty to Design Thinking.

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I. DESIGN THINKING

A. What is Design Thinking?

Design Thinking is a user-centered method to solve real-world problems. It’s an approach that uses creative thinking, teamwork, empathy, concept creation, prototyping and testing.

Specifically it’s a process to solve problems that focuses on first understanding the perspectives of the people you want to help, the unique circumstances tied to the problem, then coming up with creative, innovative and testable solutions.

There are 5 main steps for Design Thinking:

1. **Empathize**
   - Stepping into the shoes of the people you’re trying to help and seeing what would benefit them most—really understanding the “pain point” of the people you intend to help.

2. **Define**
   - Identify what the real problem is concerning your target audience. It’s not always what you first imagined.

3. **Ideate**
   - Brainstorm quickly lots of solutions: quantity over quality here.

4. **Prototype**
   - Pick your one or two best ideas to devote more time, money, and materials into making your rough invention into a reality. Focus on cheap and quick at this stage.

5. **Test**
   - Try out your prototype with your users. Refine as needed.
B. Benefits of a High School Design Thinking Program at Your School

The Design Thinking process has become very popular in recent years, especially on college campuses. Unfortunately, not many high school students have even heard of design thinking. While many college students now have Design Thinking programs they can explore, high school students don’t have many options or resources. We’d like to change this! Creating your own introductory event is a great first step to bring design thinking principles to your high school. It not only exposes students to effective problem-solving, but it can also energize and engage students and faculty in local communities in a hands-on way.

Design Thinking is a skill with life-long value whether students’ careers are in business, medicine, non-profits or just about anything else. Design Thinking has been proven to boost effectiveness in many organizations. Below is a graph showing how the stock price of companies that use the Design Thinking method outperform other S&P Index companies by 228%.

The United States is on a Design Thinking train and if you don’t hop on now, it’ll leave the station without the students at your high school. You can be the first person in your school to spark the Design Thinking revolution with a fun and introductory event!
II. ORGANIZING A DESIGN THINKING EVENT

A. Goals & Learning Outcomes

An introductory Design Thinking event will help students, parents and faculty learn what design thinking is about and get them excited about using this method to help their community and their personal lives. You may choose to target different goals and learning outcomes for your event but this guide is based on attendees leaving the event with the following:

- A basic understanding of how the Design Thinking process works and the confidence that they could use the same steps in the future
- An appreciation for the benefits of Design Thinking in the Event Project and how this might extend for solving other problems.
- Experience in using the Design Thinking process to help solve at least one problem for a non-profit organization
- For Students: Excite a core group of students to create a Design Thinking Club that will carry forward the education and problem-solving benefits
- For Faculty/Administration: Excite this group so they incorporate Design Thinking into parts of the regular school curriculum

B. Pre-Event Process

This is a summary of everything you need to do before your event. Once you have completed this list, check off the items below. We recommend that a week before your event, you should print a clean copy of this list and review each item again to make sure you have everything ready to go.

To view a clean copy of this list below, please click here.

| Item To Accomplish Before Event | Done?
|---------------------------------|------
| a. Find a design thinking expert to lead the event | □
| i. Make sure you look through this section before finalizing an event leader. | 
| b. Check dates on your school calendar | □
i. Plan the date of your event as far in advance as you can. Make sure that it doesn’t conflict with sports, debate team, or any other large student events or activities.

c. Finalize a local non-profit partner

   i. Once you have looked through this section, make sure that at least one senior representative from the local nonprofit you have selected is available for the date you have selected. They must be on site at your event, give a 10-minute presentation describing who they are and what is their biggest challenge you’re going to solve that afternoon, and be available to answer questions.

d. Reserve event room

   i. Once you have finalized the event date, you will need to reserve a room at your school that can seat the amount of people you hope will attend the event (recommended: 40 people). You’ll also need space for a materials supply table, and two more tables for snacks and registration. The presenter will need audio and video equipment, so make sure the room you reserve can accommodate these needs. Plan on:
      1. 1 hour for setup
      2. 3 hours for the workshop
      3. 1 hour for cleanup

e. Faculty sponsor to attend event

   i. Find a faculty member from your school to attend the event. He or she can help supervise, set up the AV equipment, let you into the school on weekends if the doors are locked, and provide any last minute logistics that you may need.

f. Get approval for budget

   i. With the help of your faculty sponsor, try to get approval for approximately a $200 event budget. This will cover snacks, drinks, and some prototype materials and office supplies. Many items you’ll use can be found in cabinets and basements at the homes of your students (items their families can donate). If you can’t get a small budget approved, you will have to pay for it yourself, or raise funds from parents or local sponsors.

g. Create a promotional poster
i. Please read this section on how to make an effective marketing poster. Once you have completed the poster, print it out and tape it around your school. Send an electronic version to as many people outside your own school as you think may have an interest in design thinking. You should also invite teachers and students from nearby schools to join you.

h. Make school announcements

   i. Please read this section before creating an assembly announcement at your school so you can see an example of what a presentation might look like.

i. Recruit student leaders

   i. To make your event run smoothly and to reduce your time commitment, find at least 3 students to help you. You can delegate tasks to them and they can be a big help during the event to help you set up and adapt to anything unexpected during the event.

j. Partner with faculty at your school and nearby schools

   i. Besides finding students to help you, it will be beneficial to also get a few faculty members to help you from your school and schools near you. Ideal faculty members might teach engineering, entrepreneurship or other business-type classes. Faculty can: help during the event, help secure a budget, coordinate the room reservation at your school, clear your date on the school calendar, and help spread the word about your event to colleagues at other schools. A faculty partner at another school can also help recruit their students to increase attendance.

k. Offer incentives for attendance

   i. We’ve found that the two biggest incentives for a high school student to show up for a weekend event are extra credit points in a class and community service hours for school credit. Email as many teachers as you can and ask them if they will offer extra credit to their students who show up at your event (and these teachers will also likely promote the event for you). As for community service hours, if those are required at your school, get in touch with the faculty member in charge of community service and make sure he/she will be able to approve offering credit to students who attend. Don’t be afraid to ask your principal to help by emailing all the teachers in your school to encourage offering extra credit for students to come to the event.
1. Create event email blasts to students to advertise the event
   
   i. Please read this section on how to create an email to encourage students to come to your event. Feel free to use this template, or create your own.

m. Create RSVP tracker
   
   i. Using an Excel or Google spreadsheet, create a list to track the names, grades and contact info for people who register for your event.

n. Alert your school newspaper and parent newsletter
   
   i. To spread the word about your event, contact as many people, clubs, and organizations within your school community as you can. Especially make sure that your event is printed in the school newspaper, sent via a parent newsletter, and included in any alumni mailings well in advance of your date. If parents read about your event, they might persuade their kids to attend.

o. Have a student newspaper reporter attend event for future write up
   
   i. You not only have to think about the setup for your event, but also the post-event impact. This includes getting great press for it! Make sure that someone involved in the school newspaper attends your event so that he/she can write a summary in the newspaper about you and your awesome event.

p. Create Instagram and social media accounts
   
   i. Create social media accounts to help advertise your event to students. Students will be more likely to come to your event if they see it on social media. Post pictures and videos every couple of weeks to make sure kids keep your event top-of-mind. Make sure the posts are fun so they would entice a student to come!

q. Find great prizes
   
   i. If you can offer a door prize(s), that is a useful student recruiting tool. Ideas for door prizes include tickets to a professional sporting event, concert tickets to a popular band, or even a desirable parking space in
front of your school for a month (if your students are old enough to drive). Consider asking parents to donate anything that teens would value.

r. Photography

i. Assign either a student, faculty member or parent to take photos during your event so you can share the photos later with a larger audience. These will be useful to show off design thinking to the community and spread the word to those who couldn’t attend about how your school is doing cool projects!

s. Test A/V equipment prior to event

i. To make your event runs as smoothly as possible, test the audio and video equipment in the room you have chosen prior to the event with the exact computer that will contain the presentation. Make sure that one of the teachers or students attending the event is very comfortable setting all that up in case something technical goes wrong.

t. Print out the “personas” that you have created for the event

i. There will typically be 3 “personas” from the nonprofit group you’re helping at the event. Here’s more info about personas. Print one copy of each persona for every table at the event.

u. Make a concluding event survey

i. To conclude the workshop, make a survey that everyone can fill out so you know how effective the workshop was for them. It is recommended to do paper copies as it is easier to tally. An example can be found here.

v. Buy snacks & supplies

i. To keep up student energy in the room during your event, you’ll want to have a snack table. Make sure to get a variety of snacks and drinks for everyone to choose from. Include some nut-free and gluten-free options as well. Please read this section before buying all your supplies.

w. Gather random objects for prototyping

i. Along with all the supplies mentioned above, you should be stockpiling random objects in your house that people can use during the rapid prototyping phase. The more unusual and crazy items are, the better
they will spark creativity during your event. These objects are supposed to get people thinking outside the box for solutions. A toy lobster, some Darth Vader legos, and a nerf gun are all quirky examples you could use.

C. Event Day Process

Plan on arriving to your event space about 1 hour before the event to accomplish the following:

1. Post signs to show attendees how to get to the exact building and room that your event will be hosted in.
2. Give everyone attending the event your (or one of your team member’s) cell phone numbers in case they get lost. And if you have the manpower to do so, it would be a good idea to have a greeter outside the building of your event space to make sure people know where to park and how to get to the room once they enter the building.
3. When you're in the event space, start by arranging the tables how you’d like them. A recommendation for the layout would be having 2 tables for supplies, 1 for registration, 1 for snacks and drinks, and about 8 tables for workspace. The tables for the workspace should be arranged in pods, where everybody can collaborate.
4. The event leader should arrive about 40 minutes before the start time to make sure that his/her presentation will hook up to the projector smoothly. They should also get comfortable with the space, meet you and your team, and give you any input on how the space is set up.
5. Inside the event space, make sure everything is where it needs to be (i.e. sticky notes and writing utensils are on the work tables, food and drinks are set up on their correct table, sign-in sheet and name tags are at the registration table by the front door).
6. The last piece of the set-up process is to gather your team together about 10 minutes before the start of the event and get them fired up for an energizing and fun afternoon!

D. Working with a local nonprofit partner for your event

This Event Guide assumes you will be using the session to help solve the problem(s) of a nonprofit organization in your community. Selecting the right non-profit partner is key to having a great event.

1. What makes a good partner?
The qualities to look for when you select a local nonprofit organization for your event are:

- The organization appeals to the students of your school
  - If students are passionate about the nonprofit you select, they will be more likely to attend your event

- The organization has a problem that will fit the event model
  - The nonprofit should have a clear, concrete problem that will fit the time constraints for your event (about 3 hours). Your students should be able to generate about 6-10 preliminary solutions/prototypes to solve this problem by the end of the event.

- The organization should be located no more than 20 miles from your school
  - There will be several meetings between your students and the nonprofit you select, so it will be really helpful if you can drive to them within 20 minutes. This will save time-pressured students and administrators a lot of driving time.

- The organization should be enthusiastic and respond in a timely manner
  - During your preliminary emails, calls, and meetings with this group, they should respond quickly and enthusiastically. If they are not reliable early on, then they might not be the best partner for you. Your event success will require a dedicated partner, so if the relationship doesn’t seem right in the beginning, cut your losses and find a new nonprofit partner.

2. Identify Areas for Growth

- Once your nonprofit partner is chosen, the next step is to choose one of the biggest challenges they need help solving.

- When you first approach them, try to have this come across positively, i.e., not sounding critical. One suggestion is not to say you want to “fix their problem”, but rather you want to help them grow faster. This puts a friendlier, positive spin on your initial interaction.
• Schedule an initial meeting with them to discuss some areas for growth that you could help with. You should create a list of 4-6 possible ideas. Once you have this list, you’ll narrow this down to 1-2 best ideas, so the more you have to start, the more options you’ll have to choose from. As mentioned earlier, these areas for growth should be “solvable” in about 3 hours. Make sure this problem is simple enough and relatable to the people attending your event (probably the majority will be high school students). They should clearly understand and feel excited to solve whichever challenge you choose. Here are some examples of problems you might solve:
  ○ The organization is having trouble communicating their message to a certain audience such as middle school girls
  ○ A certain program they run isn’t doing as well as they would hope and they can’t figure out ways to increase attendance or donations
  ○ They are having trouble raising money and need innovative event alternatives to their annual gala dinner

• Once you have selected the opportunity for growth that you would like to help solve, create a “stakeholder’s map”. A stakeholder’s map is a graphic representation of all the people involved in the problem you are solving. To help you find the real problem your stakeholders are experiencing, you should create a map or diagram of all the people involved and all the subsets of people involved. Stakeholders may also include inanimate objects. Once you have this map, you’ll be able to create scenarios around your problem which will help you redefine the challenge to fit the people you are trying to help.
  ○ For an example, please see this section
  ○ For more examples and information, please visit this website

• To help the people attending your event fully understand what is the problem you have chosen and whom it affects, you should draft 3 or 4 “personas”. A persona is a representation of someone affected by the problem you are solving. You should create a writeup on this person and include their photo. To do the write up, you will need to interview people actually experiencing the problem first hand. When interviewing them, make sure to really get to know them as a person and find out their story relating to the problem. Turn this interview into a paragraph that will give the attendees an idea of who this person is and how they are affected by this problem. Make sure that the person has allowed you to use their name and photo (if
not, then make up a name and find a picture that could represent them as a placeholder). To see an example, please go here.

E. Finding Your Event Leader

An experienced design thinking event leader is one of the most important elements to success in your program. The event leader runs the workshop and will be responsible to make the outcome productive and positive. Try to network in your community with local university or community college faculty, as well as business experts in local design thinking consulting firms.

Here is a suggested list of people who could be your event leader:

1. A faculty member from a nearby college with Design Thinking experience
2. A parent at your school who may have Design Thinking experience
3. A local Design Thinking expert in the business world
4. A national Design Thinking expert who might fly in for your event
   a. DFA (Design For America) has a staff of experts based in Chicago who might consider coming to lead your event

Just like the nonprofit you choose, the leader should be very responsive and able to call or meet with you once every 2 to 4 weeks leading up to your event.

F. Content

Regardless of whom you choose to lead the event, we would recommend roughly following this curriculum. For a sample event slide show, please go here. Also you can download this excellent process guide from Design for America (link).

1. Introduction to Design Thinking
   a. What is Design Thinking?
   b. How to use this method
   c. Why and when to use this method
   d. Show examples of projects or companies that have used Design Thinking
2. Creativity Challenge
   a. You'll want to get everyone energized and moving with a creativity challenge. For an example click here.
   b. Create about 4-8 groups for the challenge
      i. Assign each group one person, one thing, and one adjective
      ii. Then tell the groups that they can use any materials in the room to design an object revolving around these three entities.
iii. Get two groups to stand up, as they will compete against each other to see who can create the best object around the constraints above in 60 seconds

3. Introducing the Problem
   a. Introduce the representative from your nonprofit partner and ask them to describe what their organization does, and what is the challenge they’d like your group to help solve (about 10 minutes).
   b. Hand out the persona sheets and show those on the big screen to the whole group.
   c. Go through the personas with the group and read through a couple of key details about each one.
   d. Then tell each group to choose one that they would like to build their solution around. Each group will solve the exact same problem, but designed around the needs and specifications of the persona they chose.

4. Designing Solutions
   a. Lead the group through the process of prototyping and teach them how to find solutions specifically focused on the user they have chosen
   b. A great way to do this is a chart that looks like this:

   ![Persona Chart Image]

   In this chart you can see there are 6 categories. You will want each group to make one of these charts on a blank piece of paper and put it in the middle of their table. The point of this chart is for the attendees to model and recreate what their person may feel, see, gain, etc. from the problem you are solving for. Once they have an idea of what they may hear, for example, they will write their idea down on the post-it notes you have provided and then stick it down onto the chart into the correct slot, in this case the “Hear?” section.
   c. Once the groups have had time to put their ideas down, have them go over all of them. After this, the next step is to reframe the problem with this new knowledge of how that problem affects their person. You can
reframe the problem with a “How Can We (HCW)” statement. The framework of an HCW is “How Can We + user + behavior + place ”. The final product of what this might look like is “How can we encourage middle school girls to directly interact with healthy foods in the produce section?”

5. Ideation
   a. Now that each group has their HCW, it is time to brainstorm some solutions. Similar to before, have the groups write down as many ideas that can solve the HWC on post-it notes and put them in the middle of the table.
   b. There are actually a few rules to brainstorming that you’ll want to make sure that each group knows about:
      - Quantity over quality
        - The more the better!
      - Defer Judgement
        - There are no “bad” ideas at this stage
      - Build on ideas
        - You should be sharing your ideas while writing them down so others can build off of them. Work together as a team to create the best solution possible.
      - Encourage wild ideas
        - Wild ideas are always great because they either have something that's never been thought of before or they inspire others as a launch pad
      - Visualize ideas
        - Every idea that you come up with should have a visual aspect to it. This can be a stick figure drawing, paper model, etc. This is very important because it shows your group exactly what you are thinking and how it could be executed.
      - Stay Focused
        - This process can get off track, so make sure to stay focused and only write ideas that fit the HCW you started with.

6. Building
   a. Choose 1-3 of your post-it note ideas to build into a prototype.
   b. When building one of these ideas, make sure that they represent how the idea looks, sounds, feels, etc. so that someone could clearly visualize what it would do in real life.
   c. Once your group has their prototype, ask someone to test it. Get a student to walk around to each group and ask to test their product. This person should experience all that it has to offer and at the end
explain what they liked, but also give each group some advice on what you thought they could improve upon.

7. Conclusions
   a. Now you should wrap up the event by thanking everyone who helped, including a big thank you to your event leader.
   b. Following this, tell attendees they need to take a survey that you have created before they can leave.
   c. Hand out the survey you made and once the attendees are done, collect them and... get to work on cleaning up!

III. WHAT’S NEXT?

i. The first step after the event is to go through your survey responses to evaluate how effective the workshop was for the attendees.

ii. Go through all the videos and pictures and post them on social media and send them to everyone who attended!

iii. Follow up with the event leader. Send him/her videos, pictures, and the survey information. Tell him/her that you will keep in touch with your progress on implementing these ideas with the non-profit.

iv. Create a Design Thinking Club that can include anyone who came to the workshop as well as anyone in your school and community. This club will work with the non-profit to implement the solutions that you created in the workshop.

v. Contact your non-profit to tell them how the workshop went and that you and your club are excited to work with them on implementing the resulting ideas. Also send them pictures, videos, and survey results. Then arrange weekly meetings with your club and the nonprofit until your idea is up and running!
IV. SAMPLE MATERIALS

A. Event checklist

Here is a fully detailed checklist of what to do before the event and here is a link that will allow you to access this checklist in a clean format so you can use it the day before the event to make sure you haven’t forgotten anything.

B. Marketing poster sample

There are some key aspects about this sample poster that are important to note.

- Think outside the box when naming your event, other than just “Design Thinking Event”. For example, as shown above, you can call it an “Innovation Tournament” or “How to Think Like a Billion Dollar Company”. Students are more likely to show up to something with a fun, exciting and interesting title.
• With promotional materials like posters, you want certain information to stand out. In the case of this poster, community service hours and Nuggets tickets stand out because they have pictures attached to them, are at the top of the page, and contain almost all the color on the page. You want to highlight the benefits that will appeal to prospective attendees such as, in this case, being able to mark some community service hours off their list, getting a chance to win Nuggets basketball tickets, and really anything else fun that would motivate students to show up.

• The poster design should be clean, eye-catching and communicate your message.

Feel free to use this poster template or create something better for your audience.

C. Sample marketing email blast to students

Subject Line: Want to think like a billion dollar company?

Hi Everyone,

Have you ever wondered how billion dollar companies like Snapchat, Instagram, and Google brainstorm their big new ideas? Welcome to the concept of Design Thinking.

We just happen to be hosting a Design Thinking event this Sunday, November 13 from 1-4pm in Grant Hall. This is a perfect way to learn how to think like Billion dollar companies!

And, if that wasn’t already enough, you’ll get COMMUNITY SERVICE HOURS, a chance to win NUGGETS TICKETS, and there’s FREE FOOD! What more could a high schooler want?

If you would like to sign up, please fill out this Google Form. Bring your friends and all grades and teachers welcome.

If you have any questions don’t hesitate to ask.

We hope to see you Sunday,

Student Event Organizer Name(s) Here

There are some key aspects about this email example that are important to note:
• The subject line is the most important thing about this email. This is the “hook” to get someone to open your email. You want it to be catchy, short, and enticing. The subject line above makes a student want to open and read your email.

• Make sure to highlight the incentives. As shown above, the incentives are in all caps and in color. Think to yourself “If there are 3 things I want every person who reads this email to walk away with, what would those be?” Once you’ve decided this, then highlight, bold, color, etc. those 3 things.

• Make sure to include a Google Form (name, grade, email, etc.) so people can sign up right away!

D. Stakeholder’s map sample

This stakeholder’s map example has many great aspects:

• The entire diagram is impactful because of the colors and the simple way it is designed. The categories are clearly marked with 3 colors and 3 groupings. There are also markings such as a heart or medical sign for the people displayed to make it clear what their role is in the problem. Even the numbers and sizes of the people are drawn intentionally. For example with “siblings”, there are 3 characters drawn as two large and one small. The more specific you are the better!
• First decide how many categories you have, and then draw the diagram accordingly (if you have 5 categories of people, find a way to put them into a Venn diagram format or something else that fits your model).

• Start labeling as many people as you can who are affected by this problem! Be as creative as you like!

• For more information, please visit this site.

E. Powerpoint presentation sample to promote your event

If your school has student assemblies or other gatherings where you can make announcements, you should use that opportunity in advance to market your event and explain why students should attend.

Here is a link to a sample presentation.

V. APPENDIX

A. Supplies List for Event

Here is a link to a sample supply list for items you should buy for your event.

B. Links to online design thinking workshop samples

• DT4T website for more opportunities and resources
  ○ Link

• Stanford crash course video on what is Design Thinking and more information on how to jumpstart Design Thinking at your school
  ○ Link

C. Photos from DT4T’s pilot event in Denver, CO (November 2016)
D. Contact information

We hope this Start-up Kit was useful! Have fun planning your first Design Thinking event and please send us a few photos afterward so we can share them on our website.

For any questions, feedback or to request more information, please go first to our website and then contact ogreenwald19@kentdenver.org.