Design Challenge: Redefining the Gift-Giving Experience

Description
In this Activity Plan, students will engage in design thinking through a fun and fast-paced design challenge. The challenge involves participants recollecting the last time they gave a gift to someone; their partners then “design” a solution to demonstrate how the experience could be improved in the future.

The activity is an adaptation of the “Virtual Crash Course in Design Thinking” created by Stanford University’s “d.school” (the Hasslo Plattner Institute of Design). d.school uses the design thinking methodology, in which designers stress the importance of developing empathy with users they’re working with, to ensure that useful and meaningful artifacts are created as a result of their work.

The primary intended outcome of this activity is to demonstrate to students how empathy can increase an audience’s engagement in the creative process, even during a relatively simple hour-long exercise such as this one.

By involving the user in the design process from the outset and by creating an emotional connection with the user by learning more about that person’s interests and passions, designers can be certain that what they produce is relevant to their users.

For more concrete applications of design to employment, see the Activity Plan “Working as a Designer.”

Lesson Objectives
The student will be able to:
- Recognize the stages involved in design thinking as outlined by the d.school
- Recognize the role of empathy in design thinking

Assumptions
- Students will not have previously conducted this activity.

Terminology
Artifact: a product of human art and workmanship. Ulrich (2011, p. 2) describes an artifact as “any product of intentional creation, including physical goods, services, software, graphics, buildings, landscapes, organizations, and processes.”

Design: the act of developing solutions to problems through the creation of objects, systems, or environments.
Empathy: the ability to understand the feelings of another person. This is achieved through relationship building. Empathy involves listening, creating connections, and caring for others.

Design thinking: a methodology that combines the practice of empathy with creative and analytical approaches used to foster innovation. Design thinking involves cross-disciplinary collaboration; it draws inspiration from approaches used in engineering and manufacturing, the arts and social sciences, and business. Design thinking supports flexible approaches to problem solving, allowing the model to be personalized and customized to a wide variety of different settings.

Estimated Time
1–2 hours

Recommended Number of Students
20, based on the BC Technology Educators’ Best Practice Guide

Facilities
Regular classroom space with desks/chairs for all students, a projector with computer and speakers, and Internet access

Tools
• Hot glue gun
• Scissors
• Staplers
• Utility knives (optional)

Materials
Any combination of the following “scrappy” materials that can be used to create quick prototypes:
• Aluminum foil
• Bamboo skewers
• Brass split pins
• Cardboard
• Construction paper (coloured)
• Felt
• Hot glue sticks
• Jute twine or butcher’s string
• Paperclips
• Paper cups
• Pipe cleaners
• Popsicle sticks or tongue depressors
• Sharpie pens
• Straws (jumbo or regular-sized)
• Tape: masking tape, duct tape, or electrical tape (coloured)
• Toothpicks
• Velcro (adhesive backing)
• White glue and/or glue sticks
• Zap straps (coloured)
Resources

An Introduction to Design Thinking: Process Guide (Hasslo Plattner Institute of Design at Stanford)


Design Processes (University of British Columbia)
http://dstudio.ubc.ca/toolkit/processes/

Maker Day Toolkit (Industry Training Authority)
http://www.itabc.ca/sites/default/files/docs/discover/Final%20MakerDayToolKit.pdf

Technology Education 11 and 12: Drafting and Design Integrated Resource Package, 2001 (BC Ministry of Education)
http://tinyurl.com/z3kzczz

http://tinyurl.com/jcmo3n4

Go For a Ride!: Virtual Crash Course Video (the Gift-Giving Project)
https://dschool.stanford.edu/resources/virtual-crash-course-video

Assessment

The following scale may be used for the purposes of evaluation, in conjunction with the rubric found below. The rubric may be used to conduct teacher-led assessment, peer assessment, and/or individual assessment.

- **Beginning**: Attempted, but criteria not completed to satisfaction
- **Developing**: Attempted successfully at the minimum level
- **Accomplished**: Completed successfully at a higher than satisfactory level
- **Exemplary**: Completed successfully at an exceptional level
## The Gift-Giving Experience Assessment Rubric

<table>
<thead>
<tr>
<th>Stage</th>
<th>Beginning</th>
<th>Developing</th>
<th>Accomplished</th>
<th>Exemplary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empathize</td>
<td>Interviewer demonstrates limited empathy for partner</td>
<td>Interviewer demonstrates empathy for partner at a satisfactory level</td>
<td>Interviewer demonstrates an accomplished level of empathy for partner</td>
<td>Interviewer demonstrates an exemplary ability to empathize with partner</td>
</tr>
<tr>
<td>Define: capture</td>
<td>Interviewer demonstrates limited ability to capture findings from</td>
<td>Interviewer demonstrates satisfactory ability to synthesize findings from</td>
<td>Interviewer demonstrates accomplished ability to synthesize findings from</td>
<td>Interviewer demonstrates exemplary ability to synthesize findings from</td>
</tr>
<tr>
<td>findings</td>
<td>conversation with partner</td>
<td>conversation with partner</td>
<td>conversation with partner</td>
<td>conversation with partner</td>
</tr>
<tr>
<td>Define: problem</td>
<td>Interviewer demonstrates limited ability to define problem statement</td>
<td>Interviewer demonstrates satisfactory ability to define problem statement</td>
<td>Interviewer demonstrates accomplished ability to define problem statement</td>
<td>Interviewer demonstrates exemplary ability to define problem statement</td>
</tr>
<tr>
<td>statement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ideate</td>
<td>Interviewer demonstrates limited ability to sketch out solutions based on problem statement</td>
<td>Interviewer demonstrates satisfactory ability to sketch out solutions based on problem statement</td>
<td>Interviewer demonstrates accomplished ability to sketch out solutions based on problem statement</td>
<td>Interviewer demonstrates exemplary ability to sketch out solutions based on problem statement</td>
</tr>
<tr>
<td>Prototype</td>
<td>Interviewer demonstrates limited ability to generate prototype</td>
<td>Interviewer demonstrates minimally satisfactory ability to generate prototype</td>
<td>Interviewer demonstrates accomplished ability to generate prototype</td>
<td>Interviewer demonstrates exemplary ability to generate prototype</td>
</tr>
<tr>
<td>Test</td>
<td>Student demonstrates limited ability to capture feedback</td>
<td>Student demonstrates ability to capture feedback at a minimally satisfactory level</td>
<td>Student demonstrates accomplished ability to capture feedback</td>
<td>Student demonstrates exemplary ability to capture feedback</td>
</tr>
</tbody>
</table>
Student Activity

When you design, you are not designing for yourself but for someone else. In this activity, you will be redesigning your partner’s experience of giving a gift to someone. The goal is to empathize with your partner, to the point where you are able to redesign the gift-giving experience in order that the next time they give a gift, it may prove to be a better experience for them.

Procedure

Think about the last time you gave someone a gift—the entirety of the gift-giving experience from start to finish. The experience can include any and all of (but is not limited to) the following:

- Realizing you needed to get a gift or forgot to get a gift for someone
- Thinking about what to get and deciding on what you wanted to create or buy
- Receiving or not receiving thanks for your gift

Figure 1—Stages of the design process

Image credit: d.school (Hasslo Plattner Institute of Design at Stanford)
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https://creativecommons.org/licenses/by-nc-sa/3.0/

Figure 1 illustrates the stages of “design thinking” as presented by the “d.school,” formally known as the Hasslo Plattner Institute of Design at Stanford University. Your activity will be framed using this model. The steps can be explained as follows:
Design Thinking

**Empathize**
Learn about the audience for whom you are designing, by observation and interview. *Who is my user? What matters to this person?*

**Define**
Create a point of view that is based on user needs and insights. *What are their needs?*

**Ideate**
Brainstorm and come up with as many creative solutions as possible. *Wild ideas are encouraged!*

**Prototype**
Build a representation of one or more of your ideas to show to others. *How can I show my idea? Remember: a prototype is just a rough draft!*

**Test**
Share your prototyped idea with your partner for feedback. *What worked? What didn’t?*
1. **Empathize**
   To begin, you will learn what’s important to the person you’re designing for by asking him or her a series of questions about the last time he or she gave a gift to someone.

**Interview (8 minutes)**
Ask your partner about their last experience of giving a gift. Try to understand as much about your partner’s experience as you can. Ask probing questions to deepen your understanding (e.g., *Why did you do that?* or *What made you decide that?).

Each partner has four minutes to interview the other, and then the roles are reversed.

| Notes from your first interview |
Dig deeper (8 minutes)
Now concentrate on the points that you found most interesting from the interview you just conducted, and try to find out even more about your partner. Try to engage with him or her about the gift-giving experience on an emotional level. Question your partner's motivations; invite him or her to tell stories related to these topics.

Each partner has four minutes to dig deeper, and then the roles are reversed.

Notes from your second interview
2. Define
   During the Define stage, you will synthesize the conversations you had with your partner to communicate a clear statement that captures his or her practical needs, as well as any insights you’ve gleaned into what’s important to them when it comes to giving gifts.

   **Capture findings (3 minutes)**
   Take some time to reflect on the conversations you’ve been having with your user.

   **Identify needs**
   Generate a list of the needs your partner is trying to accomplish by giving gifts (this list will usually include verbs (e.g., demonstrate gratitude, earn respect, show appreciation).

   **Clarify insights**
   Insights reveal personal information that relates to your partner’s personality. For example, maybe your partner only purchases gifts that support a local charity, which shows that they are socially engaged. Insights can tell you a lot about the person giving the gift, and not just the recipient. Insights may be inferences that you have derived from conversation with your partner, though your partner doesn’t have to have said any exact words that end up being recorded as insights—this may involve a creative leap or risk on your part.

   **Capture Findings**

   **Needs:** things they are trying to do*
   *use verbs

   **Insights:** new learning about your partner’s feelings/worldview to leverage in your design*
   *make inferences from what you heard
Define a problem statement (3 minutes)
Review the needs and insights that you’ve just recorded in the previous step. Take the one need and one insight you’ve just recorded that you think are most relevant, unexpected, or meaningful about your partner, and jot them down in the “Define problem statement” section.

Consider the title of this activity: “Redefining the Gift-Giving Experience.” Based on what you’ve learned through empathizing with your partner, how does this activity translate to his or her personal experience?

Keep your problem statement short and specific.

<table>
<thead>
<tr>
<th>Define problem statement</th>
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<tbody>
<tr>
<td>Partner name/description</td>
</tr>
<tr>
<td>Partner's need (continued)</td>
</tr>
</tbody>
</table>

partner’s need

Surprisingly // because // but...
(circle one)
3. **Ideate**
   Ideation involves brainstorming as many solutions as possible.

**Sketch four radical ways to meet your user’s needs (4 minutes)**

*Both partners*: sketch a minimum of four solutions based on your problem statement; avoid using words. No one will be judging you on the quality of your artwork. If you come up with four sketches and there’s still time remaining, continue creating more sketches.

**Sketch at least four radical ways to meet your user’s needs. (4 minutes)**
4. **Prototype**
   **Build Your Solution (10 minutes)**
   Using the available materials, create an object that somehow represents the solution that you’ve previously identified in Step 3.

   You have 10 minutes to create your prototype.

5. **Test**
   On the basis of feedback from the prototype, how effective was this design challenge?

   **Share Your Solution and Get Feedback (8 minutes)**
   Now that you’ve created your prototype, fill in the feedback grid. The goal is not to try and convince your partner that the prototype you’ve come up with is necessarily the best or only solution to the problem you’re trying to solve—instead, think of the prototype as one more point of entry into deepening the conversation around your partner’s needs. By thinking about what worked and what could be improved, and by asking questions and sharing ideas, you will learn even more about how to meet those needs.

   Be sure to put your prototype in your partner’s hands and have them provide you with feedback.

   After four minutes, be sure to switch roles with your partner.
### Feedback Grid (8 minutes)

<table>
<thead>
<tr>
<th>What worked?</th>
<th>What could be improved?</th>
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<tbody>
<tr>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>List any questions you have.</th>
<th>List any ideas you have.</th>
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</table>
Reflection

Even in only one hour, and even with limited instructions and materials, this activity may very well have demonstrated how invested you can become in a concept (gift-giving) in a short period of time, simply by having been invited to participate. In the process, this exercise has helped walk you through the five stages of design thinking.

The following questions are a chance for you to reflect on your participation in Redefining the Gift-Giving Experience, as well as the effectiveness of the activity itself in achieving its desired outcome.

1. How did engaging with a real person and testing your prototype with a real person change your perspective about the prototype you created, based on your partner’s feedback?

2. What was it like showing unfinished work to another person?

3. How did the pace feel, relative to how you normally work?
4. Based on where you are now with your partner and the prototype that you developed, if you went through this exercise again, would you try to gain more empathy for your partner?

5. If you were to go through this activity again, what would you do differently? Would you redefine the problem statement? Would you ideate more solutions? Would you craft a new prototype?

6. Are there ways you could apply the approach used in this activity to your own life? Explain.