Design Challenge Kit

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DENVER PUBLIC SCHOOLS INNOVATION LAB

MADE IN COLLABORATION WITH
THE DESIGN GYM

DENVER PUBLIC SCHOOLS
Discover a World of Opportunity™

#designchallengeDPS @imaginariumDPS

How to Use This Kit

OVERVIEW

The imaginarium Design Challenge is your opportunity to pitch an innovative idea that has the potential to radically reinvent public education. Everyone is welcome to submit and application to pitch an idea! Design challenges happen up to twice a year with thousands of dollars in prize money awarded to the most innovative ideas.

What is a design challenge kit and why do I need it?

The Design Challenge Kit is a self-guided tool to help prepare anyone who is interested in developing an innovative idea and pitching it. There are two parts to the kit: Idea Prep and Pitch Prep. Idea Prep provides strategies for how to design, develop and test an innovative idea. Pitch Prep provides an outline of what to include when you present your overall concept in front of an audience for funding. Ultimately, this kit will help you start the process of developing and testing your idea so that you will get some practice with the design process and submit the best possible application for the Design Challenge.

What is a Design Challenge Info Session?

Design Challenge Info sessions are in person workshops where you can: 1) receive hands-on guidance on specific Idea Prep methods, 2) work alongside imaginarium staff to get personalized coaching, and 3) meet other innovators who are interested in transforming education. Each session is 1.5 hours and is designed for innovators who are curious but unsure about how to start to those who have serious plans already in place.

Design Challenge Info Session #1: Thursday, April 6th from 5:00-6:30pm, Location TBD
Design Challenge Info Session #2: Wednesday, April 19th 5:00-6:30pm, Location TBD

Questions or need more support?

Email imaginarium@dpsk12.org

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Design Challenge Kit

Idea Prep

- Pre-Work
- Examine
  Learn about the problems and users.
- Understand
  Connect the dots.
- Ideate
  Come up with lots of ideas.
- Experiment
  Build to test then share to learn.
- Distill
  Create the narrative to make it live on.

Pitch Prep

- Pitch Kit
- Pitch Examples
- Desired Funding
- Judging Criteria

Good to Know

- FAQ's
- Rights & Responsibilities

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Pre-Work

Identify your problem statement.

OVERVIEW

The problem statement is the foundation of what you're trying to solve and who you're trying to solve it for. You will use this as the backbone for shaping the research and exploration you do throughout the design sprint. As you learn more about your user needs and ideas, this statement can be updated to be more accurate.

My team, _____ ,
name of team

is trying to help _____ ,
a group of people (teachers, students, parents, etc...)

deal with _____ .
a problem or pain point they have

We think the answer might be _____
your proposed idea (optional)

_____ .

EXAMPLE

My team, Teacher Chat, is trying to help teachers and parents deal with infrequent and challenging communication. We think the answer might be some type of technology that automates notifications via text message.

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Examine

Learn about the problems and users.

OVERVIEW

This phase is about framing the problem and business objective by feeding your head as much as possible about user needs. Leverage a range of methods including field work; quantitative, qualitative, and analogous research; competitive analysis, user and expert interviews, and whatever else can help inform what's happening related to your problem. Keep an open mind in this phase and allow yourself to be surprised. Just like a detective at a crime scene – it doesn't need to make sense yet, you're just collecting all the clues.

METHODS

EMPATHY INTERVIEWS

Find users, experts, and other stakeholders and go deep learning about their needs, emotions, and behaviors related to the problem. Leave your opinion out of it, and ask for open ended stories like 'tell me about how ____ shows up in your life' or 'tell me about a time ____ worked well.

MARKET ANALYSIS

Spend time uncovering information and inspiration that already exists in the world. Look inside and outside your industry for data, trends, competitors, and stories related to the topic at hand. Is anyone selling this already? How are other schools solving this? How are big companies solving it?

SPACE/PLACE VISITS

Get out from behind your desk and spend time where your users actually are. Stay long enough to see patterns, and use the AEIOU framework to help guide your observations to different variables: Activities, Environments, Interactions, Objects, and Users.

OUTCOMES

Research notes, user stories, and quotes captured on sticky notes. The more the better. You will come back to these stories throughout the process.

Understand

Connect the dots.

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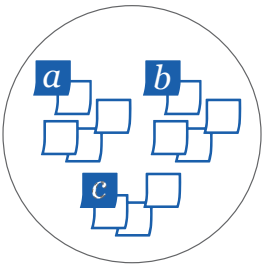
This phase is about synthesizing your research. We capture the research on sticky notes so that we can start connecting the dots between what we heard. Avoid the urge to come up with ideas or solutions, but rather focus on understanding the problem in a new way with deeper attention to the user's voice and needs.

METHODS



CLUSTERING

Group your sticky notes into themes. Name the themes based on deeper level emotions, behaviors, or pain points. Experiment with clustering in different ways and identifying unexpected connections.

INSIGHT STATEMENTS

If someone walked in the room and asked what the most interesting thing is that you've learned so far, what would you tell them? Distill it into a concise, provocative sentence that provides a new understanding of the user. Use the 'mad lib' above to help.

HOW MIGHT WE...

'How Might We…' is a simple phrase that helps us turn our new insights into questions that will inspire us to have lots of ideas. For example, if our insight was that students prefer to have more healthy options at lunch, we could create the question 'How might we give students more healthy options during meals?'. These questions will fuel our brainstorming of ideas in the next phase.

OUTCOMES

Several insight statements that highlight a deeper understanding of the user needs – these are the 'Ah-Ha!' learnings you came up with. Several 'How Might We…' questions to help spur new ideas in the next phase.

Ideate

Come up with lots of ideas.

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This phase is all about using brainstorming to come up with lots of ideas that solve your user's problems. Good ideas come from lots of ideas, so go for quantity. Getting past the obvious and creating something original isn't easy. If you have an idea already, put it aside and push yourself and your team to think wide and explore other possibilities. Save constraints like cost or time for the end - it's much easier to scale a big idea back than it is to make a safe idea interesting.

METHODS

SOLO TO GROUP IDEATION

Kick off by setting a timer and giving each person 5 minutes of solo ideation in response to the How Might We questions. Then have everyone share out their ideas, while the rest of the group uses the phrase 'Yes And…' to build on the ideas being shared out.

FRANKEN-IDEATING

Once you've got a bunch of ideas on the wall, have everyone grab any 3 random ideas off the wall. Give everyone 2 minutes to come up with an idea that mashes them together into a new idea. Run this activity several times.

VOTING

Use voting to help the group narrow down on top ideas in a fast but constructive manner. Rip a sticky note into small strips, and give each person 3 strips. Each person flags their favorite ideas, quickly highlighting where the most excitement is.

OUTCOMES

At least two top ideas or concepts to begin experimenting within the next phase.

Experiment

Build to test then share to learn.

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This phase is about answering some hard questions about why your idea might not work. Make a list of the biggest questions you have about your idea, then build some things to try and them. Our goal is to start cheap and fast, so set a timer and move quickly. It doesn't need to be expensive, so pull out the construction paper, cardboard boxes, and scotch tape. Share these prototypes with your users early and often – learning is the main priority in this phase.

METHODS

TEST THE PRODUCT: LOOKS LIKE/ FEELS LIKE

This is about building a physical version of your idea. Try methods like sketching, wireframing, and building using whatever supplies you can find. Recommended if you're building a product or device, such as a piece of furniture or mobile app.

TEST THE PROCESS: STORYBOARDING

Similar to a comic book, this is a frame by frame snapshot of how a user would interact with your idea. Draw out each scene and ask – what are they doing? Feeling? Interacting with? Recommended if you're testing a service or process, such as a better way for kids to get to school.

TEST THE EXPERIENCE: ROLE PLAYING

If your idea is more experiential, try setting up the environment full scale and acting it out. Establish roles, objects, and questions you want to answer. Attempt to fully immerse yourself in the scene, and understand how you feel as the user. Recommended if you're testing an interaction, such as improving school culture.

OUTCOMES

Several different prototypes that test your idea. Feedback and notes from various users you have shared it with. Remember, it isn't as important whether they like the idea or not — instead focus on why they feel that way. Your idea should evolve because of this feedback.

Distill

Create the narrative to make it live on.

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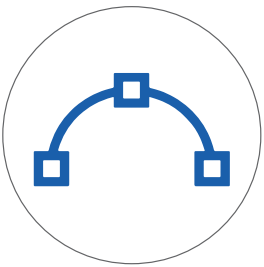
This phase is about telling the story and making your idea actionable. Reflect on the outcomes of each phase – the research, the user insight, the idea, the prototypes and user feedback – and strip them down to the essentials for getting others excited about your idea. Talk about both successes and failures and how you got to the final solution. Include how to deploy and measure concept success.

METHODS

AUDIENCE EMPATHY

Spend some time thinking about who you will be communicating the story to. What excites them? What will be on their mind? What's the first question they're going to ask? What emotion or action do you want to leave them with? Work backwards from there.



STORY ARCS

Every good story follows an arc. What is the journey you can take your listeners on? How can you communicate the emotion and tensions you uncovered throughout the sprint? What is your ask of them at the end of the story?

VISUAL ARTIFACTS

Think beyond the slideshow format and explore ways to blend auditory, kinesthetic, and visual elements. Create fresh posters, sketch up user stories, and create prototypes for the audience. The more they can feel and experience, the more likely they will be to support it.

OUTCOMES

A concise, interesting story that summarizes the outcomes of each phase. Use this story to help create your final pitch – see the Pitch Prep section for all details.

Pitch Components

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How to create and deliver your pitch.

For the soft pitch, each team will have 3 minutes to present your idea. This means you have to be short, sweet, to the point, and also grab people's attention. For the soft pitch, teams must present without slides. Only finalists will be able to use slide decks.

INTRODUCTION

Who are you, and why are you and your team uniquely qualified to lead this idea? What makes you passionate about this work? Provide a short story to illustrate the background or inception of why you are compelled to address this problem.

PROBLEM STATEMENT

What is the educational problem you are trying to solve?

VALUE/IMPACT

Why does this problem need to be solved in education? Who is directly impacted by this problem?

SECRET SAUCE/INNOVATION

What is the unique solution or idea you are proposing in order to solve? How does idea solve the identified problem? Describe the main steps or features.

DESIRED FUNDING

How much money are you requesting (up to $10,000 for startup business ideas and between $500 to $1,000 for smaller scale ideas)? How much will it cost to execute your solution and where will the money be spent?

MARKET ANALYSIS

What else already exists in the market? Why is this different?

USER RESEARCH

What evidence do you have of why people want or need this idea?

OUTCOMES

What do you hope to see change as a result of your solution? How will this work towards more equity for all students?

FINALE

Why should the judges and audience choose your idea?

Pitch Examples

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Need some inspiration? Watch how startups, entrepreneurs, global innovations, and others pitch their ideas to audiences, investors, and judges:

Louisiana Student Pitch, International High School, 4.0 Schools: (YouTube)

https://youtu.be/akbdsegoA3Q

Rooted School, 4.0 Schools (YouTube)

https://youtu.be/GvM_QY4xMtc

uCC, 4.0 Schools: (YouTube)

https://youtu.be/5tzaNdRDJ4w

Operation Spark, 4.0 Schools (YouTube)

https://youtu.be/-q1o78VyDRs

Henry May, CoSchool, Launchpad 2015: (YouTube)

https://youtu.be/oFCxfsSbJPw?list=PLZmXGL9dXEKJ4p8B60eQM-rD7Rgl-JsylD

Gavin Armstrong, Lucky Iron Fish, Launchpad 2015: (YouTube)

https://youtu.be/6cN1M0_abDw

Ayla Schlosser, Resonate, Launchpad 2015: (YouTube)

https://youtu.be/J3GpzqfLFeQ

Desired Funding

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Funding should be spent on idea execution and development (not planning).

A DPS school site must be connected to the idea execution in order to distribute funding.

DPS is required to enter into an Independent Contractor Agreement with anyone paid to provide professional services (i.e., programmer, videographer, graphic artist, app designer, etc.).

Contact Danna Ortiz (Danna_Ortiz@dpsk12.org) with specific questions around award funding.

ITEMS THAT CAN BE FUNDED THROUGH THIS AWARD

Contractor
- Development and design
- Graphic Design
- Videography
- Content Expert/Consultant

Technology
- Devices & Hardware
- Software, online subscriptions, web hosting

Incidentals
- Books
- Materials
- Consumable supplies

Other event type resources

ITEMS THAT **CANNOT** BE FUNDED THROUGH THIS AWARD

Lawyers and legal fees (IP development)

Materials for students: i.e. books or devices to use in a classroom

Personal time to develop or work on the winning idea

TYPES OF FUNDING

Seed: A seed is a small-scale idea in its earliest stage that addresses a need in a classroom or school in DPS. Funding range up to $2,000.

Startup: A startup is a medium-to large scale tested concept that addresses a need in multiple classrooms or schools in DPS. Funding range up to $10,000.

Judging Criteria

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The following criteria will be used to evaluate the soft pitches and final pitches during the design challenge:

Innovative

Demonstrates novelty, uniqueness, and functionality, hence adding new value to education. Something that has not been done or tried before.

Solves a Need

Provides a solution to a complex educational challenge.

Integrated with Denver Public Schools

Solution addresses a need tied directly to a DPS school site.

Feasible

Scope of idea is feasible within the proposed budget. Small ideas may request up to $2,000 in funding. Startup ideas (potential to become a viable business) may request up to $10,000.

Promotes Equity

Idea promotes more equitable opportunities or helps overcome inequities within education.

Aligned with Denver Plan 2020

Aligned with at least one element of the Denver Plan 2020, Denver Public Schools' five-year strategic plan. See http://denverplan.dpsk12.org/

FAQ's

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What is the imaginarium?

The imaginarium is Denver Public Schools' Innovation Lab. Our team uses design thinking and research and development methods to facilitate a process of stimulating transformative innovation at the school level and throughout the Denver Public Schools system.

What is a design challenge?

From parents and community members to teachers and students, we know that people care about and want to transform education, but where do they start? The imaginarium's Design Challenge is designed to give anyone a chance to be an innovator. Through the challenge, the best ideas are selected from crowdsourcing and judging, then they are funded and supported until they become reality. Ideas can be as small as individual classroom innovations or something that can be scaled system wide. We believe that there are many untested solutions that are ripe to be tried, they just need the opportunity and support to get started.

Why are we hosting design challenges?

Denver Public Schools' incremental performance gains are inadequate to close persistent opportunity gaps or ensure that all students leave our system prepared to thrive in college, career, and life. Transformational improvement will only result when we continually find and implement radical solutions to seemingly intractable problems in a thriving innovation ecosystem.

How does the design challenge work?

The flow of the design challenge goes like this:

- Design Challenge Application: Complete initial applciation to participate in Design Challenge
- Self-Guided Design Sprint: If your application is selected, complete key activities to learn more about your problem and refine your idea i prep for the Design Intensive
- Design Intensive: Participate in a day of Design Thinking and expert coaching to fully prepare you and your concept for Pitch Night
- Pitch Night: You'll have about 8 minutes to give your best pitch. The top ideas will receive funding and have the opportunity to receive ongoing support from the imaginarium
- Onboarding and continued support: Winning ideas begin working directly with the imaginarium and other mentors or experts in order to execute the idea and bring it to life.

How are the ideas chosen? What's the criteria?

We are looking for truly disruptive, innovative ideas that are game changers in education. Categories for judging and evaluation include: degree of innovation, how well it solves a need, being integrated within DPS, feasibility, promoting equity, and alignment with the Denver 2020 Plan.

What happens if my idea wins?

FIrst, woohoo! That's awesome. Second, you and your teammates will become clients of the imaginarium. From there, we will assign you a coach and work with you to develop your plan for development and execution. We will also help get you connected to outside experts who know how to get the job done. Support lasts for 1 year from the date of being onboarded.

Questions or need more support? Email imaginarium@dpsk12.org

Rights & Responsibilities

INTELLECTUAL PROPERTY OWNERSHIP RIGHTS

By agreeing to participate in the Design Challenge and by agreeing to accept District funds and support, Designer agrees that the District owns the intellectual property and artifacts developed during the term of the agreement. The District's purpose in supporting Designer in the development of the Design Idea is to nurture, develop and deliver innovation to the District in order to improve the delivery of public education. With that purpose in mind, upon conclusion of Designer's participation in the Design Challenge, the District will convey to Designer the intellectual property created during the Design Challenge, on terms and conditions, as determined by the District, that are consistent with this purpose as well as with the following potential interests of the District: the interest in further use of the intellectual property; the interest in further partnership with the Designer; and the interest in receiving future royalties that can be used to support future design ideas and fund the Design Challenge program.

REPRESENTATIONS AND WARRANTIES

Designer represents and warrants that it is free to enter into this Agreement and that its performance thereunder will not conflict with any other Agreement to which Designer may be a party.

Designer represents and warrants that the Design Idea is a unique and original idea that is clear of any claims or encumbrances, and that it does not infringe on the rights of any third parties. Any possible claims by third parties to the intellectual property associated with the Design Idea are described and attached as an addendum to this Agreement. Designer agrees to indemnify and defend the District against any claims of infringement by third-parties to the extent that Designer knew, or should have known, about the potential claims and did not disclose such potential claims to the District.