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I founded Project Invent in 2018 because of a frustration with our education system. Why were we so focused on having students memorize facts and bubble in answers, when those activities have no effect on a student’s preparedness for the future?

My mission was to change how and what students learn in schools. Fast forward two years, and Project Invent is a growing movement, organization, and community. We work to provide equitable access to innovative learning: 72% of the schools we serve are serving primarily low-income families. I feel blessed everyday to lead an organization of so many brilliant, mission-driven minds. From students to teachers to our team to our board, Project Invent is a collage of talented, passionate people who believe in a better future of education.

As we look to the future, I am hopeful for a world where every student engages in real-world problem-solving that prepares them for success in a tech-driven, 21st-century world. We will bring Project Invent to every high school to empower a new generation of fearless problem solvers.

Connie Liu
Executive Director
WHAT WE BELIEVE

MISSION

We empower students through the invention experience with the 21st-century skills to succeed individually and impact globally.

VISION

A generation of fearless, compassionate problem solvers.

BHAG

Every student in the US graduates with a Project Invent experience.

VALUES

1. Make it Happen
2. Set Ambitious Goals
3. Put Users First
4. Be a Bold Evangelist

CORE METRIC

Number of students who present a prototype to a community partner.
WHAT WE DO

TEACHER TRAININGS

70+

teachers trained by 2020

In partnership with Infosys Foundation USA, we host weeklong trainings twice a year for teachers to learn how to teach invention.

TEACHER FELLOWSHIP

50

schools launched by 2020

Educator fellows experience a week of training before leading a student team through a year of invention that culminates in Demo Day.

OPEN-SOURCE CURRICULUM

1200+

curriculum downloads by 2020

Our curriculum features design thinking, engineering, and entrepreneurship tools to empower every student as an inventor.

ACCELERATE PROGRAM

13

teams enrolled by 2020

A Year 2 program for students to continue building their inventions with an industry mentor and monthly workshops.

FAST FACTS

50 schools nationwide
14 states represented
72% are Title 1 schools

13

5

72%

50

14

schools

states

are Title 1

nationwide

represented

schools
ORGANIZATION OVERVIEW

HISTORY

SEP 2016  
Class of 9 students

SEP 2017  
Grows to 100 students

JAN 2018  
Project Invent incorporates

MAR 2018  
Expands to East Palo Alto

AUG 2018  
Publishes free curriculum used globally

SEP 2018  
10 schools nationwide

SEP 2020  
launches at 50 schools

LEADERSHIP

Connie Liu  
Founder & Executive Director

Aragon Burlingham  
Board President

Connie is an engineer turned teacher turned entrepreneur. She started Project Invent to empower students everywhere as innovators and changemakers.

Aragon is Executive Director at Curiosity and formerly founded a multimillion dollar STEM nonprofit. He is passionate about inspiring students with STEM.

IMPACT

TEACHER IMPACT

94% of teachers feel highly equipped to bring real-world projects into their everyday classrooms.

100% of teachers said our curriculum was helpful to their teaching.

STUDENT IMPACT

87% of students were highly satisfied with their Project Invent experience.

86% of students feel Project Invent uniquely prepared them for success in college & work.
PROGRAM EXPERIENCE

DEEP DIVE: ADAPTPLAY

Our Project Invent team in White Salmon, WA invented for and with Jose, a teenager with cerebral palsy. One of Jose's biggest hopes was to play games and chat online with his friends, just like any other teenager. Because of his mobility challenges, he wasn't able to do that with a traditional computer.

Our students invented AdaptPlay, an adaptive controller for anyone with mobility challenges to easily access the digital world. Through their work, these students went beyond the traditional classroom to creatively solve problems that made an impact.

For their impressive work, the students were awarded $1000 at Demo Day and are on track to file a patent.

Design Thinking
Students interview a community client to identify needs.

Making
Students learn coding and engineering to build their innovative ideas.

Entrepreneurship
Students pitch their inventions to tech leaders and investors.
THEORY OF CHANGE

PROJECT INVENT

THEORY OF CHANGE

Through our yearlong Teacher Fellowship we focus on six teacher practices that result in the mindsets students need to be the fearless problem solvers of today and tomorrow.

**TEACHERS**

- Make Failure Ok
- Push to the Next Level
- Be a Co-Learner
- Challenge Assumptions
- Leave Room for Exploration
- Let Students Take the Wheel

**STUDENTS**

- Ambition
- Curiosity
- Empathy
- Creative Confidence
- Agency
- Resilience

We...
- TRAIN & SUPPORT teachers.
- PROVIDE curriculum.
- HOST Demo Day.

Teachers...
- EMPOWER students.
- INSPIRE impactful projects.
- CONTINUE empowerment work throughout their teaching career.

Students...
- GAIN 21st-century skills.
- DEVELOP transformative mindsets.
- CHANGE the world.

SO WE CAN BUILD A GENERATION OF FEARLESS PROBLEM SOLVERS
GROWTH GOALS

TEAM GROWTH

2021-2022
+Dir. of Development
+Partnerships Manager
+Program Manager II

2022-2023
+Asst. Program Director
+Platform Manager
+Communications Manager
+0.66 Executive Director

2023-2024
+Major Gifts Officer
+Program Manager III

SCHOOL GROWTH
GROWTH SUMMARY

<table>
<thead>
<tr>
<th></th>
<th>2021-2022</th>
<th>2022-2023</th>
<th>2023-2024</th>
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<tbody>
<tr>
<td>New Schools</td>
<td>50</td>
<td>80</td>
<td>275</td>
</tr>
<tr>
<td>Returning Schools</td>
<td>30</td>
<td>70</td>
<td>125</td>
</tr>
<tr>
<td>Total Schools</td>
<td>80</td>
<td>150</td>
<td>400</td>
</tr>
<tr>
<td>Expenses (Program, Fundraising, Operations)</td>
<td>0.6M</td>
<td>1.0M</td>
<td>1.4M</td>
</tr>
<tr>
<td>Revenues (Steve projections)</td>
<td>0.8M</td>
<td>1.2M</td>
<td>1.7M</td>
</tr>
<tr>
<td>Ratio Cost/School</td>
<td>7.5K (5.6K)</td>
<td>6.7K (5.1K)</td>
<td>3.5K (2.5K)</td>
</tr>
<tr>
<td>FT Employees</td>
<td>5.33*</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Board Size</td>
<td>12</td>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td>Program Infrastructure</td>
<td>-Community Partner Match (growth)</td>
<td>-Flex Format (retention, recruitment)</td>
<td>-Inflection Point (growth)</td>
</tr>
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</table>
STRATEGIC PRIORITIES

1 MEASURE AND IMPROVE STUDENT AND TEACHER OUTCOMES

Develop a metrics framework that successfully measures and gives feedback to teachers in our 6 core teacher practices; Pilot new programs & measure their impact; Refine program pilots to incorporate into our primary offering.

2 GROW ELEMENTS OF THE PROGRAM

Implement a defined marketing plan to improve recruitment; Launch program changes that increase program capacity.

3 SUSTAIN FINANCIAL STABILITY

Raise a 6 month reserve fund; Increase individual giving to 30% of budget; Diversify corporate donor sources.
# PRIORITY NO. 1: IMPROVING OUTCOMES

## Implement metrics for all parts of the organization

<table>
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<tr>
<th>NEAR TERM</th>
<th>LONG TERM</th>
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<tbody>
<tr>
<td>Define an operations scorecard that measures fundraising effectiveness, board effectiveness, staff satisfaction, student &amp; teacher engagement, etc.</td>
<td>Establish a metrics advisory board of nonprofit professionals and education research experts.</td>
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## Build for sustained teacher involvement

<table>
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<th>NEAR TERM</th>
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<tr>
<td>Advocate with school administrators for teacher stipends, dedicated class time, etc.</td>
<td>Formalize a Project Invent offering to support teachers with 5+ teams.</td>
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</table>
**Improve teacher support through program pilots & redesigns**

<table>
<thead>
<tr>
<th>NEAR TERM</th>
<th>LONG TERM</th>
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<tbody>
<tr>
<td>• Build a master feedback list of program improvements.</td>
<td>• Pilot at least one major program redesign per year on a two-year cycle (Year 1: Pilot; Year 2: Refine)/</td>
</tr>
<tr>
<td>• Create a plan to phase out all programmatic elements that are bottlenecks to growth.</td>
<td>• 2021: community partner match</td>
</tr>
<tr>
<td>• Allocate 15% of budget to pilots.</td>
<td>• 2022: flexible program</td>
</tr>
<tr>
<td></td>
<td>• 2023: high production virtual teacher training</td>
</tr>
<tr>
<td></td>
<td>• Develop a protocol for evaluating and scaling pilots into program.</td>
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**Measure program impact**

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<tr>
<th>NEAR TERM</th>
<th>LONG TERM</th>
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<tr>
<td>• Develop surveys to assess 6 core teacher practices (teacher impact).</td>
<td>• Develop a standard rubric for teacher practices and student mindsets.</td>
</tr>
<tr>
<td>• Develop surveys to assess 6 core student mindsets (student impact).</td>
<td>• Develop mapping for teacher practices to student mindsets.</td>
</tr>
<tr>
<td></td>
<td>• Build processes for longitudinal surveying.</td>
</tr>
<tr>
<td></td>
<td>• Partner with researchers to produce unbiased findings.</td>
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</table>
PRIORITY NO. 2: SCALING PROGRAM

Increase fellowship recruitment

**NEAR TERM**
- Develop and implement a marketing plan to increase fellowship applications.
- Introduce rolling admissions throughout the year.

**LONG TERM**
- Establish national partnerships to implement Project Invent at 10+ associated chapters/teachers.
- 3 pieces of major general news coverage (e.g., NYT, WSJ, etc.).

Increase program capacity

**NEAR TERM**
- Increase capacity of program by 2x fellows each year.
- Introduce program length options.

**LONG TERM**
- Increase capacity of program by 3x fellows each year.
# PRIORITY NO. 3: FINANCIAL STABILITY

## Increase reliable financial flow

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<tr>
<th>NEAR TERM</th>
<th>LONG TERM</th>
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<tr>
<td>• 6-month reserve fund (200K with a budget of 400K).</td>
<td>• 6-month reserve fund (700K with a budget of 1.4M).</td>
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## Increase organization’s development capacity

<table>
<thead>
<tr>
<th>NEAR TERM</th>
<th>LONG TERM</th>
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<tr>
<td>• Development coaching for executive director and board.</td>
<td>• Hire a development director and grant manager by Jun 2024.</td>
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⭐️ = Top Priority