State of Innovation Challenge

STEM Education Innovation Alliance Meeting
December 9, 2020
Agenda

I. Objectives and Design
II. Exploring the Challenge Cases
III. Creating Solutions
IV. What's Next
Objectives

Understand project goals, development process, and timeline

Demo Challenge Website and Case Videos

Seek Alliance input on:
• Community partnerships
• Industry engagement
• Elevating student solutions
• Success metrics
State of Innovation Challenge

Objectives and Design
Goal: Create Career Connected Learning that’s relevant to the challenges youth, teachers, and industry face in 2020

2020 had problems.

Outside the classroom...
- Global pandemic reshaping our lives, our economy
- Unprecedented social and political movements rising
- Ongoing threats from climate change

...and inside the classroom
- Teachers struggling to keep students engaged in virtual learning
- Students struggling to see the “why” in normal learning in a very abnormal year
- Dropoff in WAFSA/FAFSA, postsecondary enrollment
- Limited pathways for industry to engage students directly – no worksite tours, conferences, in-person internships, etc.

We asked youth for the solutions.

www.innovationwa.org
The Challenge creates youth voice-centered, adult-facilitated, industry-aligned learning opportunities

The State of Innovation Challenge is a virtual career-connected problem-solving challenge that:

• **Empowers youth voice** in solving some of Washington’s biggest problems. Encourages hypothesis-driven thinking and human-centered design

• **Supports teachers and youth program leaders** adapting to virtual learning by creating scalable, flexible, project-based learning tools. Designed with teacher input, applicable to any learning environment, with built-in supports

• **Engages industry and postsecondary partners** by connecting them directly to the virtual classroom and helping them engage students

www.innovationwa.org
Broad coalition of partners helped shape the Challenge

40+ industry, education, agency, and community partners engaged, including:

- **Alliance Members:** STEMCore Consulting, PEI, Code.org, FIRST Robotics, College Success Foundation, Association of Washington School Principals
- **Industry partners:** AWS Educate, Microsoft, Zillow, Wagstaff, Silicon Forest Electronics
- **MS/HS Teachers:** Walla Walla Public Schools, Central Valley School District, Quileute Tribal Schools, Vancouver School District, South Kitsap Schools
- **Open Doors Instructors:** Tri-City Futures, Goodwill Longview, Career Link (South Seattle College)
- **Career Connect Washington:** Regional Networks and CCL Coordinators
- **CTE Directors and WA-ACTE**

Thank you to our partners
19 employer partners engaged so far, in both case videos and the upcoming student engagements
State of Innovation Challenge
Exploring the Challenge Cases
The Challenge asks Washington youth to help solve some of Washington’s biggest problems – the “Challenge Cases”

“The Food Chain”
Addressing food insecurity in Washington

“Responding to COVID-19”
Supporting mental health and fighting the misinformation pandemic

“Our Communities after COVID-19”
Building toward a more sustainable, resilient future
Case 1: “The Food Chain”

Help the state ensure that every Washingtonian can have access to healthy, affordable, and environmentally sustainable food during the pandemic, especially low-income households

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<tr>
<th>Theme</th>
<th>Problem Solving Prompt</th>
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<tbody>
<tr>
<td>School Meals and Healthy Foods</td>
<td>Design a plan for school meals containing food that is grown locally in Washington, and provides healthy, good tasting food to students and families</td>
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<tr>
<td>Food Waste and Climate Science</td>
<td>How could we reduce greenhouse gas emissions by reducing food waste in your community, even as people are buying more food than ever during the COVID-19 pandemic?</td>
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<tr>
<td>Food production and distribution</td>
<td>How can we help food banks connect with surplus food from farmers, restaurants, or homes?</td>
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<tr>
<td>Consumer Science</td>
<td>What are some ways that shopping for and eating food have changed because of the COVID-19 pandemic in your community? Create a meal plan and a budget that reflects these changes</td>
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<tr>
<td>Restaurants and Hospitality</td>
<td>If you were a restaurant owner today, how would you change your business to respond better to COVID-19?</td>
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**Case 2: “Responding to COVID-19”**

Help the state 1) support the mental health of teens and elders while practicing social distancing; 2) Ensure residents have **accurate**, **actionable**, **accessible** information about COVID-19, while respecting individual privacy

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<tr>
<td>Elder Isolation</td>
<td>Design a service or tool the state could use to help alleviate isolation for older adults during the pandemic</td>
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<tr>
<td>Teen Mental Health</td>
<td>Design a service or tool that would help people in your age group stay connected to each other socially and support their mental health while also protecting themselves and others from being exposed to COVID-19</td>
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<tr>
<td>Contact Tracing</td>
<td>Design a solution to ensure people are notified about their exposure to COVID-19 while still protecting their privacy</td>
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<tr>
<td>Fighting Misinformation</td>
<td>How could the state help ensure that residents can identify accurate information about COVID-19 online? How should the state share information so that the most accurate information gets to people that need it?</td>
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<tr>
<td>Understanding Information</td>
<td>Design a public information campaign, community service, or service-learning project that provides accurate information about COVID-19 for your community</td>
</tr>
<tr>
<td>Testing Protocol</td>
<td>Design a testing protocol for COVID-19 that is based on your community needs</td>
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Case 3: “Our Communities after COVID-19”

Help the state build back from the pandemic in a healthier, more resilient, and more sustainable way. How should we change our approach to housing, education, urban design, and manufacturing so that we can have healthy, connected communities?

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<td>Housing</td>
<td>As we plan for the future – what are some strategies cities or towns could pursue to ensure everyone has a safe place to live?</td>
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<tr>
<td>Urban Planning</td>
<td>How would you design an urban center that serves the needs of our communities after COVID-19?</td>
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<tr>
<td>Redesigning Schools</td>
<td>How would you redesign a classroom, school, or educational experience (e.g. school day schedule, method of learning delivery – virtual, online, etc.) to minimize the risk of COVID-19 infection and maximize effective learning for students?</td>
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<td>Manufacturing &amp; Worker Safety</td>
<td>Imagine you are in charge of a manufacturing business in your community. How would you keep workers safe while ensuring operations continued smoothly?</td>
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<tr>
<td>Climate Change</td>
<td>Design a community to lower the risk that people, homes, and businesses face from wildfires.</td>
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The Challenge is scalable based on needs/capacity

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<th>Teachers/Leaders have…</th>
<th>Youth could submit…</th>
<th>That could look like…</th>
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| 1 class period/hour    | “Nano” project       | • 2-minute Flipgrid video explaining proposed solution  
                        |                      | • No Flipgrid? Vimeo, Youtube, or email a short solution |
| 1-4 weeks              | “Micro” project      | • 5-minute video  
                        |                      | • Short essay  
                        |                      | • Newspaper editorial  
                        |                      | • Business elevator pitch  
                        |                      | • Drawing/comic  
                        |                      | • Short research project (e.g. develop short survey, ask community members, report back on findings) |
| 1-2 months or longer   | “Macro” project      | • Physical model  
                        |                      | • App or computer program  
                        |                      | • Service project  
                        |                      | • Detailed business plan  
                        |                      | • Recorded performance of a creative project (e.g. podcast, play, song)  
                        |                      | • Longer research project |
What’s Next: Growing Community Partnerships

Implementing Partners
4-H Washington, Junior Achievement, Washington DECA, Washington TSA, BBBS of SW WA (Mentor U), Boy Scouts Pacific Harbor, Open Doors programs (TC Futures, Career Link, Goodwill Longview)

Sharing Partners
MESA, PEI, AVID, Educators for Equity, Environment, and Economy, Shifting Schools, WA-ACTE, CSF, CCL Coordinators, CCW Networks

Partnerships in Development
Seattle Goodwill, JUMA, Boys and Girls Club Keystone service program, additional Big Brothers/Big Sisters chapters, Scouting chapters, United Way King County partners (YouthSource, SW Youth and Family Services, etc.)

Partnership Growth Opportunities

Partnership Request
Do you work with a youth program, community partner, education leader, or nonprofit we should engage in State of Innovation?
Email: Julia.reed@kineticwest.com
What’s Next: Industry & Postsecondary Engagements

Industry Engagements throughout December, January, and February
• Zoom webinars with industry leaders in engineering, robotics, environmental sustainability, healthcare, tech, journalism
  • Including Wagstaff, Microsoft/Minecraft,

Asynchronous video content available for viewing anytime
• Video resources from industry partners, CareerConnect@Home, Career Connect Washington partners

Also exploring postsecondary pathway engagements
• Working with WSAC, WSOS to engage Opportunity Scholars, Washington College Grant recipients pursuing Challenge-relevant studies

Mentimeter Discussion: Go to: www.menti.com and use the code 15 80 60 1
How else could we deepen industry and postsecondary connections for youth participating in the Challenge?
What’s Next: Uplifting Student Input

Common Question heard: “Will legislators, Governor, etc. get to see these student ideas?”

Goal: Every student who submits a project receives a letter of recognition from the Governor

At the end of the project, we will recognize the “most innovative” submissions from youth and adults

• Proposed recognition pathway
  • Project team selects 20-30 projects across three pathways
  • Volunteer selection board (Alliance Members?) selects final awardees

Mentimeter Discussion; Go to: www.menti.com and use the code 15 80 60 1

How can we elevate and recognize solutions proposed by youth participating in the Challenge?
What’s Next: Tracking Metrics

Draft Goals

• Student engagement
  • 500 Nano projects; 100 micro projects; 50 macro projects submitted as case challenge solutions
  • At least 50 students participate live in each engagement session

• Teacher Engagement
  • 300 teachers sign up on email list (currently @ 198); 50 lessons in the lesson bank

• Engagement with resources
  • Tracking # of website visits, # of instructional guide downloads, # of lesson plan downloads, # of video views

Mentimeter Discussion; Go to: www.menti.com and use the code 15 80 60 1

How else could we measure success with the State of Innovation?
Next Steps

• Share the Challenge with your networks – encourage them to sign up for the mailing list as well

• Email industry resource page materials (e.g. videos, articles, links to existing content) to the Challenge team

• Serve on the recognition committee – more information by February 2021

Questions, Ideas, Follow up?

Email Julia.Reed@kineticwest.com