

Lean Innovation Educators Summit

COVID-19 Dialogue

July 24, 2020



Jerry Engel 1:00pm - 1:10pm

Why we are here Who is here What we are doing



Jerry Engel 1:00pm - 1:10pm

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Summit 2020

Jerry Engel 1:00pm - 1:10pm

COVID-19 Dialogue Why we are here

BUILD Community and Resiliency in challenging times

- Discover and Share Best Practices
- Gain Tools and Ideas You Can Put to Work

BUILD on our Great Legacy

- LLP, I-Corps, Hacking 4 x
- Educators Summit 2019

THEMES

- Innovation Discovery in Response to CV-19
 - Converting Existing Courses and Creating New Ones
- \circ $\,$ Diversity and Inclusion in response to BLM $\,$
 - Creating Equal Access to Opportunity



Jerry Engel 1:00pm - 1:10pm

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Jerry Engel 1:00pm - 1:10pm

COVID-19 Dialogue

Summit 2020

Who is here

997 Registrants

283 Institutions Represented

29 Countries Represented

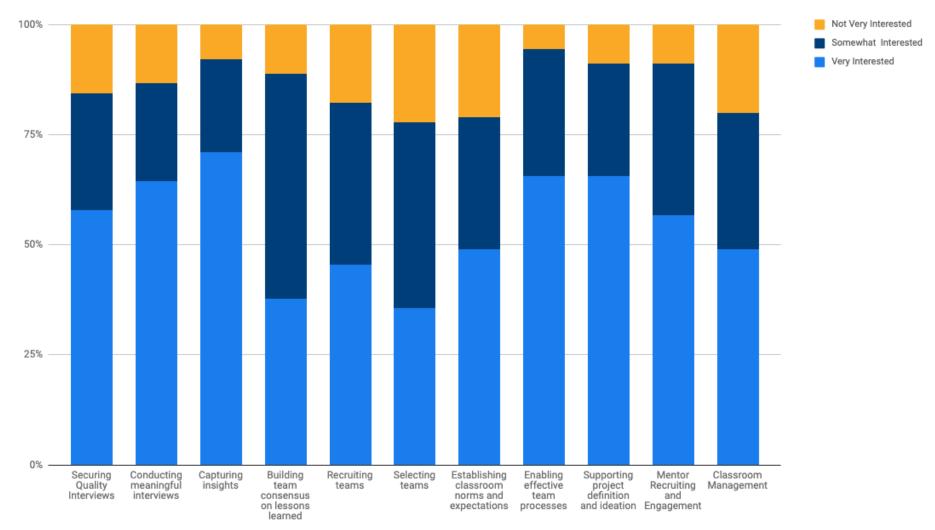




Your Pre-Meeting Input

COVID-19 Dialogue

Lean Education Topic Interest





Your Pre-Meeting Input

Top Five Challenges to Teaching LLP in the post-covid era:

- 1) Capturing Insights
- 2) Enabling Effective Team Processes
- 3) Supporting Team Project Definition and Ideation
- 4) Conducting Meaningful Interviews
- 5) Securing Quality Interviews



Thank You **Organizers and Outreach Sponsors**

COMMON MISSION PROJECT







Jerry Engel 1:00pm - 1:10pm

Why we are here Who is here What we are doing



Summit 2020

COVID-19 Dialogue

Agenda

Time	Торіс	Speaker
1:00pm	Welcome	Jerry Engel
1:10pm	Key Issues and New Challenges	Steve Blank
1:20pm	COVID-19 Challenges and Responses	
1:25pm	Converting and Scaling Existing Programs: Hacking for Defense	Pete Newell
1:35pm 1:45pm	Standing up <u>New Programs</u> from Scratch: Hacking for Oceans Hacking for Recovery	Steve Weinstein Steve Blank
1:55pm	Responding to Societal Change: Diversity and Inclusion > Equal Access to Opportunity For All	Grant Warner



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Agenda (cont.)

Time	Торіс	Speaker
2:05pm	Going Virtual	Alex Osterwalder
2:15pm	Open Q & A Session	Jerry Engel Moderate
2:30pm	Innovation Discovery & Virtual Poster Sessions	Breakout Rooms
3:10pm	Lessons Learned Reports from Breakout Room Moderators	Jerry Engel, Steve Blank, Peter Newell, Steve Weinstein
3:45pm	The Challenges Ahead in Lean Education	Steve Blank
3:55pm	Closing Comments	Jerry Engel

Hosts



Jerry Engel

Senior Fellow, Lester Center Haas School of Business, UC Berkeley **Event Moderator**



Steve Blank Serial Entrepreneur Adjunct Professor, Stanford Innovation Fellow, Columbia



Pete Newell CEO, BMNT



Steve Weinstein Senior VP, BMNT

Featured Speakers



Alex Osterwalder

Co-Founder Strategyzer



Grant Warner Howard University



Breakout Room Leads

Tom Bedecarré Chris Taylor Philip Bouchard Jim Hornthal Michael Marasco Bob Dorf Naeem Zafar Dave Chapman Paul Fox Phil Weilerstein

Stephanie Marrus

Stanford University Georgetown University TrustedPeer UC Berkeley Northwestern University Columbia University UC Berkeley University College London LaSalle Univ Barcelona VentureWell University of California, San Francisco James Chung Victoria Larke Todd Warren Jeff Reid Sid Saleh Jeff Epstein Ali Hawks Thomas O'Neal Radhika Malpani John A. Blaho Kim Polese

GWU
University of Toronto
Northwestern University
Georgetown University
Colorado School of Mines
Stanford University
Common Mission Project UK
University of Central Florida
Google
City College of New York
UC Berkeley





Steve Blank 1:10pm - 1:20pm

COVID-19 Challenges and Responses

Issues and Challenges

Who Would Have Thought...?

- The end of experiential classes?
 - Get of the building...how?
 - MVPs... how?
 - A pedagogy built around Zoom?
- Less experiential classes... or more... or better?

"When one door closes, another opens"

Alexander Graham Bell





Lean LaunchPad in the Era of COVID-19

Jerry Engel

Pete Newell, Steve Weinstein, Steve Blank, Grant Warner, Alex Osterwalder

1:20pm - 2:15pm

Common Lean LaunchPad Elements

- Team-based
- Lean methodology
 - Business or Mission Model Canvas
 - Customer Development => outside interviews
 - Agile Engineering => MVPs
 - Pivots
- Flipped classroom
- Relentless direct feedback
- H4x .. [Defense/H4Oceans] work on *sponsor's* problems
 - Double the work



Peter Newell



Converting and Scaling an Existing Program Hacking 4 Defense

Syllabus Design:

Pete Newell, Steve Blank, Joe Felter

http://hacking4defense.stanford.edu

https://www.h4d.us

www.nsin.us

Modifying An Existing Class

- Started at Stanford, scaled to 30+ schools via NSIN
- Believed that in-person Customer Discovery were critical
 - Surprise: students can do more interviews
 - But missed context of customer environment
- Modified syllabus
 - In-class 3-hours of zoom = mind numbing
 - Had Guest Speakers
 - Rotated teams into "breakout sessions"
 - team-on-team directed exercises
- Created an "off-ramp" via H4X Labs a post class accelerator



Assessment and Recommendations (1)

- Still a high value class but dependent on:
 - Validated problems and engaged sponsors
 - Instructor expertise
 - Great mentors/advisors sharing their rolodex
- The Good:
 - Interviews Gatekeepers absent, more people were accessible
 - Sponsors and Mentors Can attend & actively participate
 - Students can have longer office hours
 - Online is equal but different engaged but not hand's on
 - More progress on discovery, less on validation



Assessment and Recommendations (2)

- The Bad
 - Requires adept TA's and support
 - Massive recruiting efforts (mixers, info sessions, etc.)
 - Teams don't meet in person and esprit de corps can suffer
 - Physical development hard to validate
 - No field trips teams lacking context
 - Student Overload (learn slower)



Lessons Learned

- Logistics (proactive TA's) are critical
- Open sourced guest speaker videos and new syllabus
- You can pull this off Experiential works via Zoom
- Post pandemic
 - online discovery + onsite visits would be optimum
- Contact Info
 - Pete Newell <u>pnewell@bmnt.com</u>
 - Alex Gallo <u>agallo@commonmission.us</u>
 - Steve Weinstein <u>sweinstein@stanford.edu</u>



Steve Weinstein



Creating a New Program Hacking 4 Oceans

Ocean Health meets Entrepreneurs

Syllabus Design: Steven Weinstein, Radhika Malpani, Sophia Merrifield <u>http://h4oceans.ucsd.edu</u> <u>https://hacking4oceans.ucsc.edu</u>

Starting a New Class

- Two new universities UC Santa Cruz, UCSD
 - No existing program or infrastructure
- Created logistics from scratch by spinning up:
 - Internal Support and buy-in
 - University Domain Level Expert Full Participation
 - Sponsors domain familiarity driven
 - Funding for student teams
 - Marketing (website, demand creation, poster)
 - Recruiting was an 1:1 exercise all participants
- Tuning Pedagogy for new audience
- Learned how to do it all via Zoom!



Assessment and Recommendations (1)

- The Good:
 - Sponsors and Mentors Can attend & actively participate
 - Students Direct feedback to individuals, more engaged with faculty mentors
 - Interviews People were available
 - Ran two schools simultaneously it worked at both



Assessment and Recommendations (2)

• The Bad

- Teams don't meet in person and esprit de corps suffers
- Can't do real physical development
- No field trips real get out of the building
- Format is really different Confusion No context
 - Limited entrepreneurship classes in oceans research
 - They're scientists not entrepreneurs
 - Culture of discovery and rapid decision making takes active training
 - Student Overload
 - New to everyone involved Lack of Ecosystem
- \circ $\,$ No "next steps" available for promising teams
- Summation
 - Equal but different engaged but not hand's on



Lessons Learned

- New classes need well defined problem sets upfront as unifying focus - as early as possible
- Get the right team (internal/external)
 - Need departmental-level juice
 - Need lead internal instructor who are domain experts
 - Right cross-department participation
 - Ask the team to gain some pre-experience
 - Recruit Sponsors before recruiting
- We've open sourced our list of activities & syllabus
- You can pull this off Experiential Works via Zoom
- Contact Info
 - Steve Weinstein <u>sweinstein@stanford.edu</u>
 - Radhika Malpani radhika@gmail.com



Steve Blank



Creating a New Program: Hacking 4 Recovery

A Five-Day Class

Syllabus Design: Steve Weinstein, Steve Blank <u>https://h4r.stanford.edu</u> <u>http://innovate2impact.hawaii.edu</u>

Starting a New Class (1)

Stanford, University of Hawaii
 1) Modified an existing program, 2) Copy and repeat





- Tuned pedagogy for new audience
 - Stripped down existing syllabus
 - Tested new material, removed when it didn't work
 - Recorded lectures, open sourced



Starting a New Class (2)

- Used existing logistics: Faculty, TAs, Admin
 Minimum of one instructor per six teams + TA
- Surprise: Team Formation & Recruiting a heavy lift
 - Info sessions, mixers, brown-bag lunches
 - Pool of team members was uneven open enrollment
- Mentors had to be more proactive and prescriptive
 - Mentor pool with rolodex and advice
 - Mentors pushed students to be proactive



Assessment & Recommendations (1)

The Good:

- Teams were mostly high quality
 - existing SMB's, new startups, telemedicine, etc.
- Students got an intensive overview of Lean Methodology
- Made actual progress on product/market fit
- Interviews People were available



Assessment & Recommendations (2)

- The Bad
 - "Pickup Teams" had diverse levels of commitment
 - No field trips
 - Student Overload (by design)
 - Breakout rooms essential
 - Added whiteboarding student lessons learned each session
 - No formal place for output to go

Summary

- TA's and *intensive* recruiting critical
- Expectations of outcomes need to be set
- Class can be repeated by others
 - Lectures, videos, syllabus available as a cookbook



Lessons Learned

- Five day class is the experiential version of a survey class
- Can be used to rally a community around an issue
- Equal but different engaged but not hand's-on

- Contact Info
 - Tom Bedecarre tombed@stanford.edu
 - Steve Weinstein <u>sweinstein@stanford.edu</u>
 - Steve Auerbach <u>sauerbac@hawaii.edu</u>





Diversity, Equity, and Inclusion

Grant Warner

Responding to Societal Change

Program Challenge

Context:

The national pandemic has placed in stark relief the **racial disparities** that have been accepted in society. **Health** disparities have been among the most glaring as the infection and death rate have been 2x larger for communities of color. However, it extends to issues with access to **education and wealth** building mechanisms.

Response:

GEM I⁴ – entrepreneurial pathways for Black and Brown students **Black Learners Matter (BLeM)** – focused on educational equity







GEM I4: Diversity, Equity, and Inclusion in LLP

What was the origin?

- NSF I-Corps[™] is one of the larger Lean LaunchPad Programs ~250 teams/per year Focused on Lab-To-Market innovations Participants graduate students and faculty primarily Teams have attracted nearly \$500MM of follow on funding
- Internal tracking shows poor engagement of people of color

What was done?

- NSF invested in a partnership with GEM
- GEM has 40 year history of producing Black and Black
- 800 1000 current GEM fellows.
- GEM will leverage its network and recruiting approach **In-person** recruiting on campuses throughout shared network

COVID-19 Hits







Assessment and Recommendations

What did we do?

Adapted GEM's highly interactive seminar approach to online reality Decomposed 1 seminar into multiple events to fight Zoom fatigue

Meetups – to facilitate community

GEMpreneur[™] Workshop – Why entrepreneurship & I-Corps[™]

PEP Talks – Black/Brown entrepreneurs to share their

experience

Office Hours – follow up and next steps

Assessment:

• First 2 months:

Engaged 125+ GEM Fellows Several placed in I-Corps programs

- High levels of in-session engagement
- Scale not limited to fellows on a particular campus
- Target: Generate 15 25 "GEM" teams



Lessons Learned

- Investing in *PARTNERSHIP* to drive DEI pays dividends

Recruiting will be **difficult** in pandemic

Partnership allowed for scale, but required mutual wins

- Diverse perspectives generate diverse solutions

GEM's approach leveraged their own history of seminars to reach fellows. Different than I-Corps approach

- Remote Environment presents challenges and opportunities



BLeM: Starting a new initiative What was the origin?

- Discovery!
- Discovery calls with educators/administrators across the country.
- Goal: what were their challenges with teaching in COVID-19 environment?
- ...only to find most were not teaching in the traditional sense.
- Problem: issues with low, slow, or no internet access/machines.

This is the pipeline. The front end to all the LLP programs being run by this group.



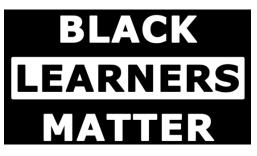


Steps Going Forward

- Discovery is ongoing Held 2 webinars – exploring problem space and those who have attempted solutions
- Social media: LinkedIn, Facebook, Instagram
- Innovators, allies, partners:

BlackLearnersMatter.com

Grant M. Warner <u>g_warner@howard.edu</u>







Alex Osterwalder

Going Virtual: Business Model Design During COVID-19



Attendee Q & A Session

To ask a question, please send a **message in the chat** or raise your hand to be called on.





Various Attendees 2:30pm – 3:15pm

Innovation Discovery and Virtual Poster Session



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COVID-19 Dialogue Breakout Rooms

You will now be split into **breakout rooms** to share your challenges and innovations while teaching Lean during COVID-19.

- Those with Virtual Posters will present
- Discussion questions will guide discussion within the group
 - What are your **biggest challenges** under COVID-19?
 - How is this challenge **different** now than during 'in-person' learning?
 - What **solutions** have you tried?
 - What was **most effective**?
 - What practices should be **avoided**?
 - What are your personal "lessons learned"?
 - Are they scalable solutions? Which innovations would you recommend to others?



Breakout Room Leads

Tom Bedecarré Chris Taylor Philip Bouchard Jim Hornthal Michael Marasco Bob Dorf Naeem Zafar Dave Chapman Paul Fox Phil Weilerstein

Stephanie Marrus

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Stanford University

Common Mission Project UK

University of Central Florida

Google

City College of New York UC Berkeley





Steve Blank, Jerry Engel, Peter Newell, Steve Weinstein 3:15pm - 3:45pm

Lessons Learned from Breakout Discussions



Steve Blank 3:45pm - 3:55pm

The Challenges Ahead in Lean Education



Jerry Engel 3:55pm - 4:00pm

Closing Comments



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Resources

- Stay Connected on Slack: <u>https://bit.ly/3f0IS7I</u>
- Send Resources to:
 - resources@commonmission.us
 - Shared Google Drive Invite to follow
- Winter Event
 - In-Person December 15 17, 2020
 - Online December 16, 2020

Longer term goal, curate a searchable repository for Lean education resources



Lean Innovation Educators Summit

Summer 2020 Lean Educators COVID-19 Dialogue

Thank you! ..and see you December 16, 2020