

## Lemann Program on Creativity and Entrepreneurship Annual Report for 2020/2021

### Introduction

# LPCE: A Year in Review



**100%** of funded students  
recommend LPCE

"The [LPCE funding] literally made [our venture] possible!!!"

- Mary Nagel, HGSE student and founder of FutureFounder - Brazil, a social impact venture  
missioned to create the next generation of founders



**20** undergraduate  
concentrations



**7** graduate schools

"Thank you so much for creating this program! I feel like it's  
small enough that people actually know me and my idea and  
really care, and that means a lot to me and has helped me to  
stay focused!"

- London Lowmanstone, Harvard College student and founder of Tech Relief, a  
venture ensuring safe equipment for first responders



**28** field-specific  
mentors



**325** event  
attendees

#### Funded Venture Member Makeup



#### Ventures in 11 Countries Worldwide



## Year One: The Lemann Program on Creativity and Entrepreneurship

Thanks to the boldness of the Faculty of Arts and Sciences and the philanthropic generosity of Jorge Paulo Lemann '61, Harvard College students are making a positive social impact while integrating liberal arts thinking into the entrepreneurial sphere. During a remarkable inaugural year, the new Lemann Program on Creativity and Entrepreneurship (LPCE) showcased the ingenuity of Harvard students as they melded venture-building tools and resources with academic knowledge to build a better world.

As envisioned by late Harvard professor Robert Lue, Richard L. Menschel Faculty Director of the Derek Bok Center for Teaching and Learning, Harvard College has tapped into the widespread undergraduate student desire to tackle global problems with tangible solutions. Over this past academic year, LPCE events, workshops, seed grants, launch funds, and an introductory course attracted hundreds of students from diverse backgrounds and inspired real-world ventures infused with the intellectual curiosity, analytical skills, and leadership abilities gleaned from a liberal arts education.

Meanwhile, the deans across Harvard College have embraced and advanced LPCE efforts to promote an actionable understanding of creativity and entrepreneurship among students and faculty. In July 2021, the LPCE was moved to a more centralized location within the Office of

Undergraduate Education, which will lend momentum and rigor to our sustained growth. Under the guidance of Associate Dean of the Harvard College Curriculum Rebecca Nesson, we will deepen the LPCE's curricular offerings and continue to foster the cross-pollination of creativity and ideas among students, faculty, subject experts, and practitioners.

Across its first year, the LPCE focused on ideas, ventures, and products that help build a "better normal" related to one or more of the following: the COVID-19 pandemic, racial injustice, and climate change. We grew an engaged community that now includes more than 100 active students, mentors, and faculty, and awarded a total of more than \$52,000 to 54 student ventures focused on social impact. We launched our community events remotely across the fall semester of 2020 and our first novel hands-on course, the Entrepreneurship StudioLab, in spring 2021. This full-year report covers the LPCE's ongoing evolution as we develop and strengthen the impulse toward innovation within Harvard undergraduate students. It describes the LPCE's success in:

- engaging students with a hands-on studio course and expanded offerings.
- advancing student ventures and mindsets with innovative tools and resources.
- establishing community and collaborations across disciplines and spheres.

In short, the LPCE helps students spin intellectual thought into real-world applications that create social and economic value in society. We bridge the gap that has traditionally separated the broad thinking of the liberal arts with the habits of mind of the workplace. And as catalogued by this report and extensively detailed in our appendix, the LPCE's resonant mission is inspiring enthusiasm and engagement across Harvard campus and well beyond.

### **Engaging students with a hands-on studio course and expanded offerings**

In our spring introductory course, the LPCE100 StudioLab carrying 2 credits, students learned how to develop a social impact venture from conception to launch. Using the framework of the UN Sustainable Development Goals, they worked together to create actionable solutions to pressing issues. Students learned to identify and properly analyze a problem, build an organizational strategy and business plan, and persuasively communicate their ideas.

Led by course head Alan Viel, a senior lecturer in the Department of Molecular and Cellular Biology, our 75-minute weekly seminars featured subjects such as business model creation, pitching tactics, and data collection. The 12 StudioLabs included hands-on class activities, popular guest speakers, supplementary material on [LabXchange](#), and four workshops hosted by the Bok Center's Learning Lab. In final projects, all students chose to tackle environmental issues. Listed below, the teams, respectively, addressed commercial food waste reduction, climate-focused community building, leveraging social media to drive environmental action, and sustainable mail-order packaging. The ventures in brief included:

- **LeftOvers** addresses the problem of food waste by incentivizing consumers and restaurants to correctly discard organic food leftovers. Developed by students David Hill

and Eric Reyes Munoz, this venture catalyzes the transport of organic waste to bioenergy companies.

- **Climate Justice Map** connects activists in need of information and resources with organizers in need of volunteers. Developed by students Lucas Chu, Milan Williams, Jett Zhang, this venture provides resources such as a story feed, an events calendar, and a one-click call to action to join campaigns.
- **Branches** motivates positive environmental action through peer-to-peer learning and social competition and validation. Developed by students Davy Deng, Matthew Hirschfeld, Amy Shi, this venture aims to revolutionize how communities approach sustainability.
- **(eco)-commerce** makes online shopping better for the environment by repurposing shipping boxes. Developed by students Katherine Deng, Charlie Neuhauser, this venture collects used boxes, rewraps them, and supplies them to businesses.

We are excited to also share that in the next academic year, the LPCE will expand our curricular offerings with four-credit StudioLab courses: LPCE101 in the fall and LPCE102 in the spring. Meeting now twice weekly, these courses will enable students to develop and apply transformative ideas to societal challenges via an interdisciplinary exploration of the liberal arts. The fall introductory course will again include activity-based learning and even more celebrated guest speakers. The new project-based spring course will help students more fully develop ventures inspired by their liberal arts studies with guidance from expert mentors. In collaboration with the Learning Lab, these LPCE courses will also include workshops and hackathons that build skills in areas such as delivering a pitch and designing infographics.

### **Advancing student ventures and mindsets with innovative tools and resources**

We are operating on multiple levels to develop an innovation pipeline that inspires and actualizes undergraduate student ventures. In addition to providing early-stage seed funds, mentoring, and networking opportunities, the LPCE attracted more liberal arts students to the innovation space through a Launch Fund competition. In November 2020, we received a whopping 44 applications from individuals or student teams across all years, concentrations, and Harvard schools. Evolving ventures focused primarily on education, health care, social justice, and the environment. All hoped to earn one of three \$10,000 awards for conceptualizing a social impact venture with transformative potential.

Our tiered approach eases students into the entrepreneurial sphere, according to student Maya Razmi. Like 65% of the applicants to our Launch Fund competition, Maya, the founder of a hygiene education program in rural Uganda, received early seed funds from our fall Accelerator. “I really liked how there was a small seed fund and then the larger application. It meant there was less pressure at the beginning, and I felt that we could work our way up,” she says. Indeed, 100% of students from our Accelerator, which is more fully described in our fall 2020 report, said in a feedback survey they would recommend the LPCE to a friend.

Our Launch Fund competition was judged by multidisciplinary faculty, industry practitioners, and Harvard alumni from diverse backgrounds and spheres such as education, entrepreneurship, art, and public affairs. This prestigious [panel](#) generously critiqued student ventures ranging from an interactive chatbot that teaches teens in low-resource areas about reproductive and mental health to a platform that empowers Syrian refugees to solve community problems. In alignment with LPCE's mission to measurably help develop student ideas, all 44 applicants received the judges' detailed feedback about their presentations, infographics, and pitch decks. The three [Launch Fund](#) winners included:

- The **Adventus** Autonomous Wheelchair, a self-driving wheelchair developed by Maya Burhanpurkar '21 to improve life for a vulnerable population through greater mobility.
- **Scholar Supreme**, an all-in-one extracurricular application solution developed by Shikoh Hirabayashi, '24 to enable students to locate and join a wide variety of extracurriculars.
- **Ed2Engage**, an analytics and visualization solution developed by Amreen Poonawala '21, Harvard Graduate School of Education, that tracks and streamlines classroom management through an equity lens.

Leveraging the popularity of our fall Accelerator, the LPCE also launched a spring [Project Support Program](#) (PSP) for early-stage innovators, which included Harvard undergraduate and graduate students in arts and sciences, business, education, and government. Ten teams received \$1k each in funds and personalized guidance to advance ventures focused on education, social justice, and religion. Ideas ranged from an app to prevent police and civilian violence at routine traffic stops to a resource to empower youth fighting for climate justice. In feedback surveys, PSP participants described access to our staff and industry mentors, community events, and skill-building workshops as valuable. Nearly all students credited the LPCE with catalyzing immense progress, including earning them accolades in well-known venture competitions beyond campus.

## Establishing community and collaborations across disciplines and spheres

Throughout the 2020-2021 academic year, the LPCE fostered a sense of community among students, faculty members, and industry practitioners. We engaged hundreds of students and community members with a total of 14 public events that included things like trivia and networking, guest lectures, and lively panels on subjects related to creativity and entrepreneurship. Since our fall report, we have hosted 5 community events with 245 total attendees with topics that included the intersection of art and climate and the elements involved in a persuasive venture proposal.

The LPCE believes deeply in the value of multidisciplinary collaboration within student venture teams, and we lead by example. Our popular ART+ workshop series, co-developed with Harvard ArtLab and described in our fall report, continued to feature conversations with artists and innovators working on today's biggest challenges. In a different vein, the LPCE collaborated with Harvard's Office of Career Services to bring students a pitch workshop as a featured event during [OCS Startup Week](#). When an LPCE student fellow also presented at a [Harvard Ventures](#)

event about the campus entrepreneurship scene, we strengthened our relationship to the broader innovation ecosystem across Harvard's many schools.

Our collective efforts culminated in a spring Festival of Ideas, an annual showcase envisioned by Dr. Lue that aims to capture the energy and cross-pollination of ideas, creativity, and entrepreneurship generated across the LPCE community. Our inaugural event was an e-Festival celebrating student work from across our full program—LPCE 100, the Accelerator, and the PSP. An audience of about 80 students, faculty, industry practitioners, and family members at the Festival learned more about the program's purpose and growth from Tamara Brenner, executive director of the Bok Center, an invaluable LPCE partner, and Sam Magee, our director of creativity and entrepreneurship. In addition, LPCE course head Alan Viel and guest lecturer and advisory board member Jeff Bartel '88 AB described the learning curve within our first introductory course. Attendees also heard directly from our three student Launch Fund winners, the four student teams from LPCE 100, and watched video pitches from the 10 student teams within the PSP. We also facilitated networking and breakout-room conversations. We invite you to [view a montage](#) that briefly captures several student projects from our e-Festival in a three-minute video generously produced by the Bok Center. To view the entire e-Festival of Ideas, please use this [link](#).

Over the past academic year, the LPCE gathered a diverse community of creative and entrepreneurial thinkers while providing students with resources and methods to activate ideas from the liberal arts. We are thrilled to report our students are deeply engaged in developing ventures to build a "better normal" across society. We enter the next academic year energized by the intellectual horsepower and creative breadth of our students and inspired to help make their ideas our reality.

## Appendix

### LPCE 100

composition of our introductory course on creativity and entrepreneurship



### The class schedule

- 1/28:** Introduction
- 2/4:** Sustainable Development and the United Nations Sustainable Development Goals
- 2/1:** Student Project Presentations
- 2/18:** Community Engagement
- 2/25:** Data Collection and Evaluation
- 3/2:** Graphic Design @ Learning Lab
- 3/4:** Feedback, Conflict, and Ideation with guest lecturer Jeff Bartel '88 AB, chairman and managing director of Hamptons Group LLC
- 3/11:** Business Model Generation with guest lecturer Huntington Lambert, Dean Emeritus of Harvard's Division of Continuing Education
- 3/18:** Prototyping Business Models: A Feedback Session with Huntington Lambert, Dean Emeritus of Harvard's Division of Continuing Education
- 3/23:** Storytelling @ Learning Lab
- 3/25:** ART+ Climate event
- 1/1:** Presenting & Pitching with guest lecturer Katrina Hagedorn '20 AB, LPCE fellow
- 1/8:** Developing Your Network with guest lecturer Jeff Bartel '88 AB, chairman and managing director of Hamptons Group LLC
- 1/16:** Public Speaking Skills @ Learning Lab with guest speaker Erika Bailey, a Harvard lecturer on Theater, Dance, and Media
- 1/22:** Creating a Web Presence @ Learning Lab

**More extensive excerpts from the four LPCE 100 teams:**

***LeftOvers** addresses the problem of food waste by incentivizing consumers and restaurants to correctly discard of their organic food waste by (1) providing financial compensation to restaurants and consumers for their excess food waste, (2) working with preexisting distributors to transport waste to bioenergy companies, and (3) charging bioenergy companies the value of excess food and a premium.*

*David Hill, Eric Reyes Munoz*

*We can connect activists who need information and resources with organizers who need people and public awareness through the **Climate Justice Map**, a community power center for climate justice. We'll include reading materials, story feed, events calendar, and one click call to action to join organizations and campaigns for anyone on the internet.*

*Lucas Chu, Milan Williams, Jett Zhang*

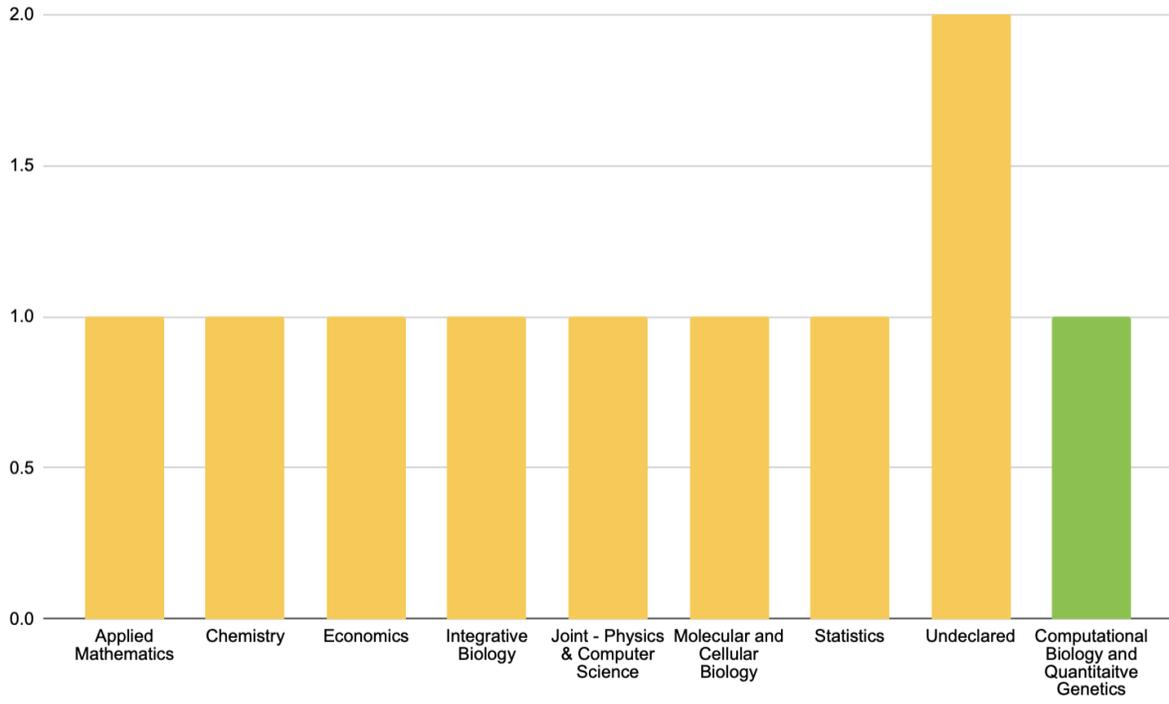
***Branches** will connect the millions of climate concerned individuals around the globe and foster like-minded communities. This social connection is everything. Imagine being able to share the pride you feel when you take positive actions. Social validation is how we spread love for our planet. We all have knowledge and tips to share. Peer-to-peer learning is how we improve ourselves as people and all the more so when it comes to sustainability. Even social competition is critical in motivating human behavior. There can be no sustainability without social sustainability. Branches is here to revolutionize how communities approach sustainability and move us one step closer to saving our planet.*

*Davy Deng, Matthew Hirschfeld, Amy Shi*

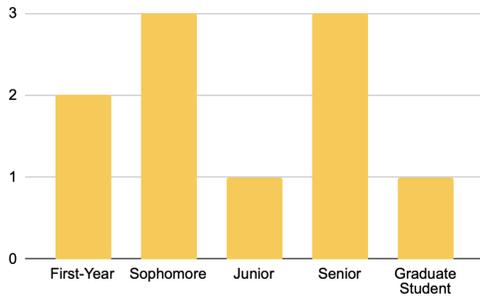
***(eco)-commerce** [is] an environmentally friendly approach to the rapidly expanding realm of online shopping. Boxes are collected in special drop off locations, where customers are rewarded. [They are then] inspected to ensure structural integrity. [During] re-wrapping, boxes and specially designed wrapping paper are supplied to businesses shipping out products. Boxes are sent back out to customers in fresh wrapping and containing new products.*

*Katherine Deng, Charlie Neuhauser*

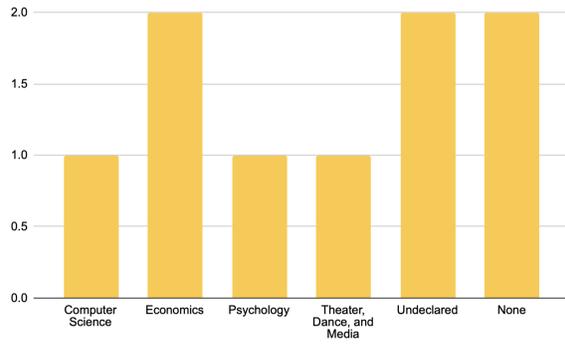
**LPCE 100 students: undergraduate concentration (orange) and graduate program (green)**



**Class year of students in LPCE 100**



**Secondary of students in LPCE 100**



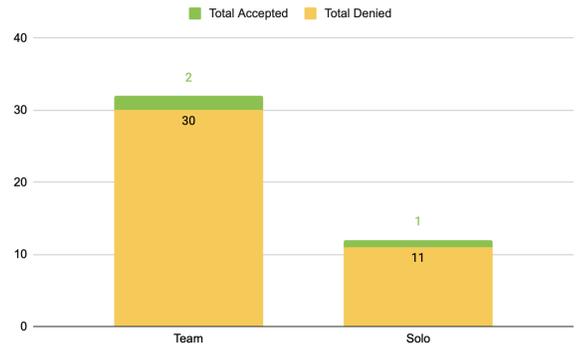
## Launch Fund



### Graduate and undergraduate applications



### Team and solo applications



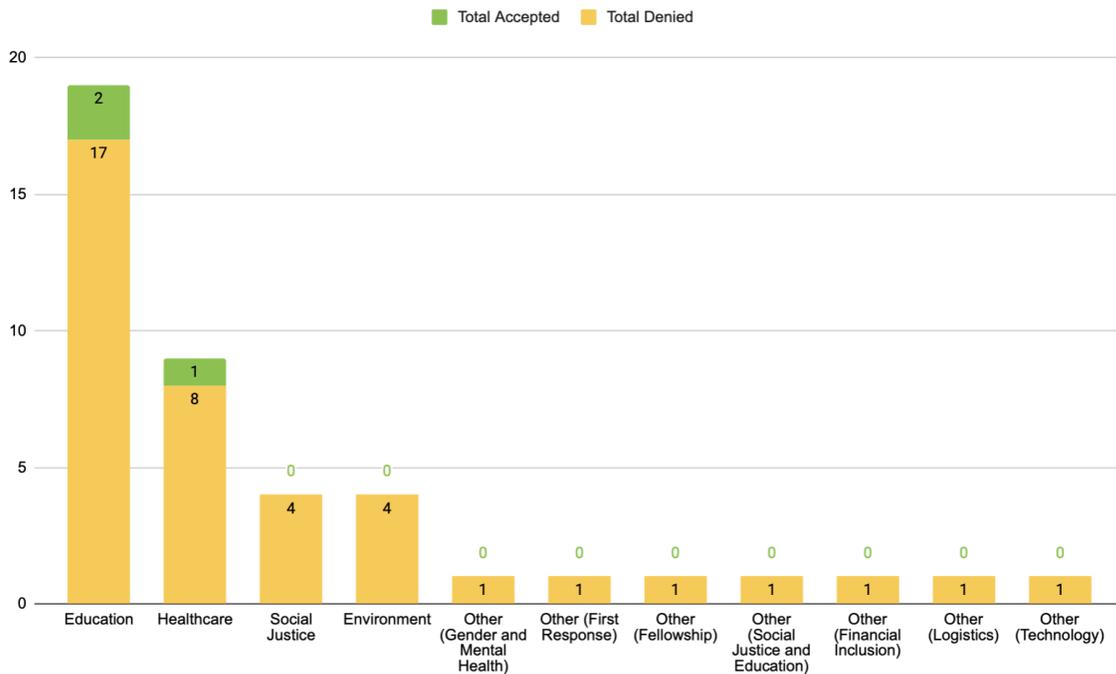
### For-profit and nonprofit applications



### Accelerator fund recipient



## Launch Fund: primary category of venture



## Project Support Program (PSP)



Below are excerpts from creative and entrepreneurial venture ideas by the PSP students:

**3D Virtual Classroom** is a platform to develop 3D virtual classrooms to make online courses interesting and to provide the learning resources to the people who have very limited learning materials to solve education injustice.

*Hui Din '21, Harvard Extension School*

**Clubes de Ciencia Ecuador (CdeCEc)** is an organization that aims to positively influence the role and perspective of STEM in the Ecuadorian society via international education and

collaborative networks. To achieve this, CdeCEc provides bright Ecuadorian high school and college students with yearly high-quality STEM workshops in an international setting.

*Oscar Hernandez Murillo '23, GSAS*

**Faith & Polity** is a platform where progressive people of faith can access thought leadership, connect with one another, and build a collective political voice.

*Claire Kim '23, HKS/HBS*

**FutureFounder - Brazil** is a social impact venture missioned to create the next generation of founders.

*Mary Nagel '21, HGSE*

**KadaKareer** is a low-bandwidth, community-based career development platform that provides contextualized career resources and coaching for low-income students in rural Philippines.

*Michi Ferreol '21, HBS*

**TrustCall** is an app that allows police officers to look up the civilian they pulled over and initiate a video call with them rather than engage in a traditional traffic stop with the associated risks.

*Hari Narayanan '21, Harvard College*

**PlayHouse** is a virtual show companion right at your fingertips, making digital live performance more immersive and interactive.

*Veronica Leahy '21, Harvard College*

**Urban Athletic Association (UAA)** is an after-school and summer program designed to provide full and equitable access for under-served youth to sports that have traditionally only been accessible to wealthy students.

*Will Aubin '21, HGSE*

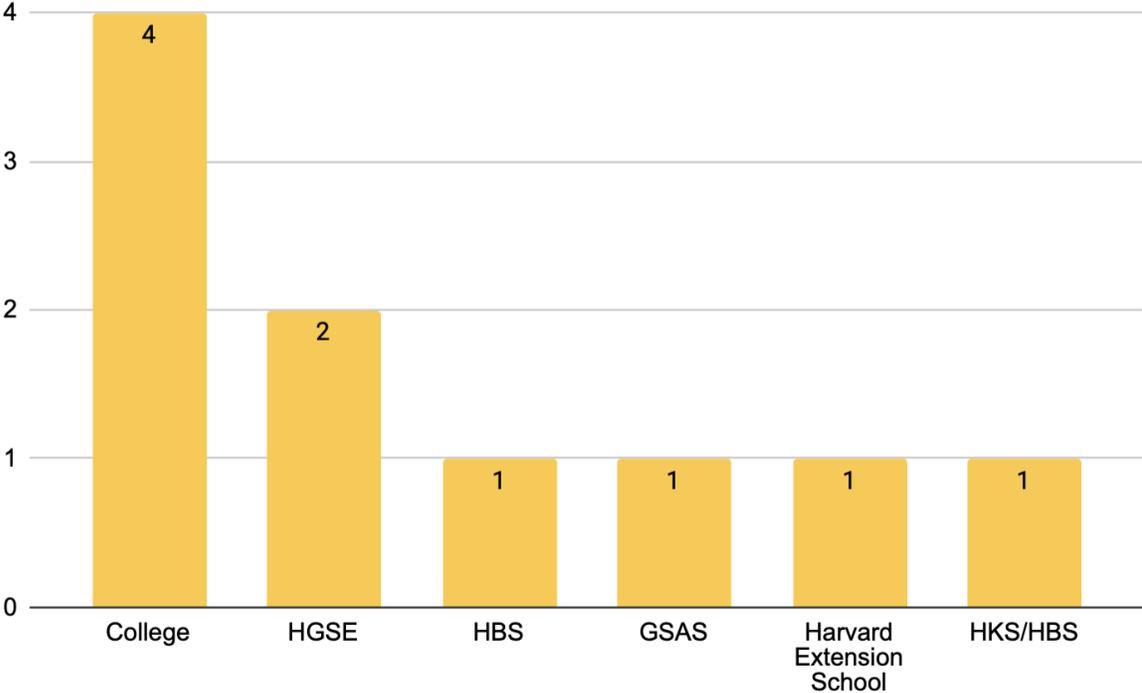
**Vehicle2Grid Analytics** is a platform that transforms electric vehicles (EVs) into grid-scale batteries. Through a SaaS and B2B model using aggregated vehicle-to-grid (V2G) assets, it will provide insights to key stakeholders including grid operators, charging station operators, and businesses with goals to electrify their fleets.

*Rohan Jakhete '21, Harvard College*

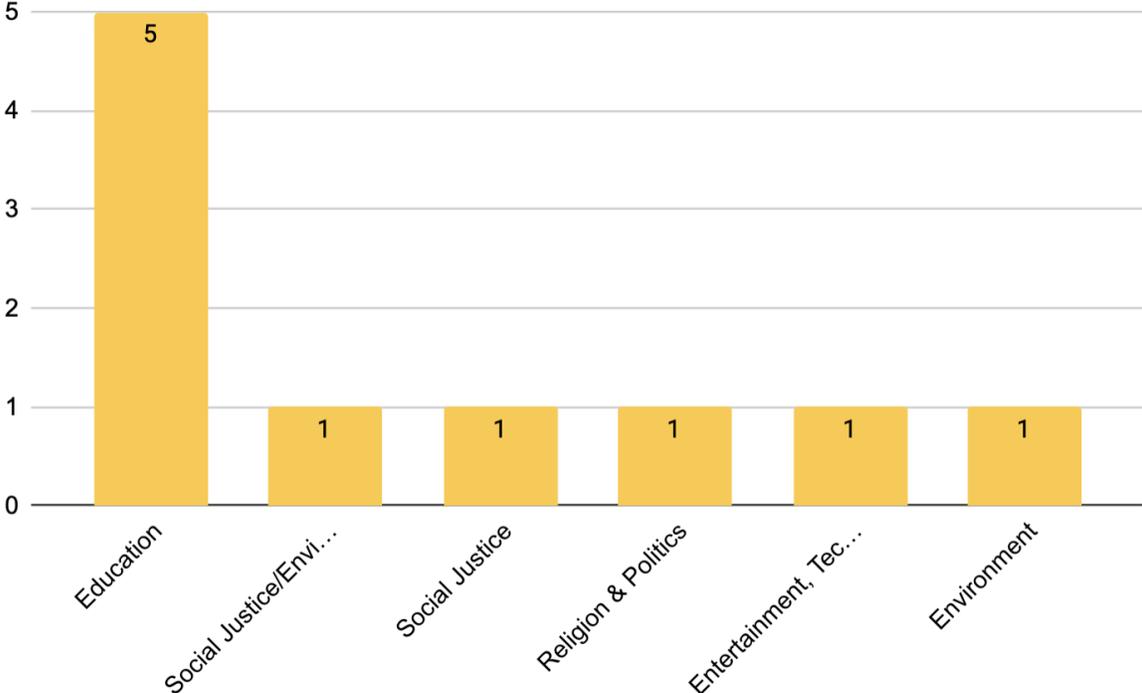
**Youth Environmental Consumers Alliance (YECA)** is a youth organization that seeks to unify and mobilize the consumer power of young environmentalists to convince companies to make specific practices more sustainable and socially conscious.

*Sophia Gustafson '24, Harvard College*

**Harvard affiliation of PSP students**



**PSP students: primary category of venture**

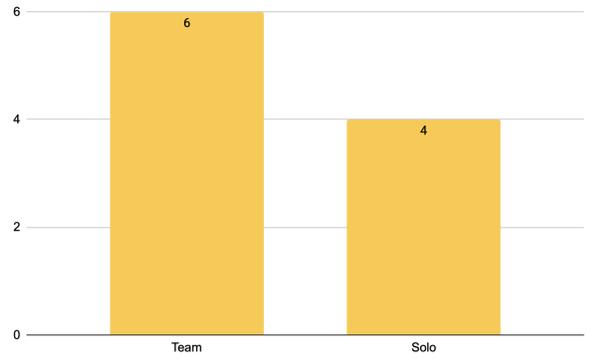


## PSP Ventures

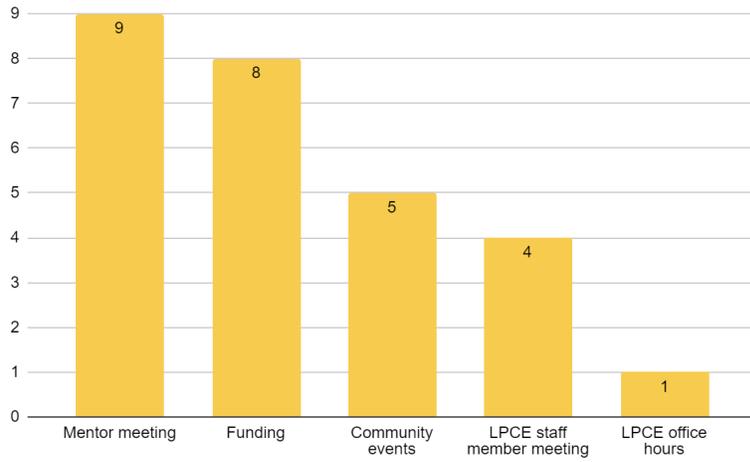
### Non-profit vs for-profit



### Team vs solo



### PSP student feedback on preferred aspects of program (9 respondents)



## Community Events (spring 2021)



## Community Events for the entire year



### **Brazil-based collaboration**

Mary Nagel, co-founder of FutureFounder-Brazil and a graduate student at the Harvard Graduate School of Education, participated in our inaugural cohort. She was joined by co-founders Rodolfo Fraga and Rodolpho Camargo, who are both Brazilian natives. FutureFounder is a social impact venture aimed at creating the next generation of founders. Currently focused on strengthening the innovation ecosystem across Brazil, this team fervently believes anyone can become a FutureFounder. Through the latest in learning science, the FutureFounder team has assembled a cutting-edge virtual-based innovation readiness program designed by a team of Harvard/MIT educators, consultants, and entrepreneurs. After successful completion of the program, FutureFounders will have the opportunity to gain first-hand experience through placement opportunities with innovation-driven enterprises on the frontlines of innovation.

With the help of the Project Support Program, FutureFounder launched this past June. Mary Nagel attributes much of her venture's success to the knowledge and help of her PSP mentor [Fábio Hauagge do Prado](#). Fabio has also agreed to be on the LPCE Advisory Board, further strengthening our ties with education and social innovation in Brazil.

### LPCE Staff



**Sam Hunter Magee** works to connect education-innovation and creative-entrepreneurship communities. He is the Director on Creativity and Entrepreneurship for Harvard University. Previously, he was the Entrepreneur-in-Residence at Harvard University for Operation Impact, an arts administrator at the Massachusetts Institute of Technology, a Creative Entrepreneurship lecturer at Boston University, and a school teacher and arts department chair. He independently consults on innovation best practices via his arts and education startups, he advises multiple arts and education ventures, and serves on several startup and arts-admin boards. Sam joined the Lemann Program on Creativity and Entrepreneurship in March of 2020.



**Maria Menglin Guo** is the Senior Fellow on Creativity and Entrepreneurship at the Bok Center for Teaching and Learning. She helps design, develop, and implement seminars and courses for the undergraduate student community. She also collaborates extensively with Bok staff, who focus on pedagogy and course innovation. Previously, she was a Fellow at the Hutchins Center for African & African American Research, Academic Advisor at NYU Shanghai, and Program Assistant at Columbia Law School. She earned her Master's degree in Education Policy and Social Analysis from Columbia University. Maria also founded the Jackson School Mentor Program at the University of Washington, where she received her Bachelor's degree in International Studies. She has previously lived in Beijing, Seattle, New York, and Shanghai with study abroad experience in London and Brussels.



**Dr. Alain Viel** is the director of Northwest Undergraduate Laboratories and senior lecturer in the Department of Molecular and Cellular Biology at Harvard University. During the spring of 2021, Alain was the course head for LPCE100: StudioLab on Creativity and Entrepreneurship. He is the co-founder of The Biopolis summer school program, which focuses on using biological principles to meet the urban challenges of cities. Alain is also a founding member of BioVisions, a collaboration between scientists, teaching faculty, students, and multimedia professionals that focuses on science visualization. He is the co-author of the award winning animation series “The Inner Life of the Cell.” Alain received his PhD from Paris 6 University (Pierre et Marie Curie).



**Rowen VonPlagenhoef** (LPCE Fellow, 2020-2021) is a Harvard College 2021 graduate with a degree in Integrative Biology and a secondary in energy and environment. He acted as a content developer and Course Assistant for LPCE100. He is a content co-developer for LabXchange and was a finalist in the Talents Paris 2024 startup competition for a project developed as part of the Biopolis. Rowen's experiences range from interning at Nference, a biomedical startup in Kendall Square, to managing the Harvard Glee Club, a 501(c)(3) nonprofit organization. He is currently working on a startup that creates a carbon neutral ammonia fertilizer generation process. Rowen finished his time as an LPCE Fellow upon graduation this spring, but he is still staying on with the team in an advisory position. You can read his outgoing reflection letter [here](#).



**Marina Watanabe** (LPCE Fellow) is a PhD candidate in the Biological and Biomedical Sciences program at Harvard University. She acted as a content developer and Teaching Fellow for LPCE100. Her graduate research at Brigham and Women's Hospital focuses on the discovery of novel combination therapies in the treatment of HER2+ breast cancer. In addition to conducting biological research for over nine years, she has extensive experience in STEM outreach and education. Prior to joining LPCE, Marina was an Education Innovation Fellow with the Harvard Initiative for Learning and Teaching where she mentored Harvard and MIT startup teams working to improve the field of education. Marina is passionate about educational equity, and has worked to recruit underserved and underrepresented students into science and medicine through her previous roles as head curriculum developer and instructor for Dana-Farber Cancer Institute's Continuing Umbrella of Research Experiences (CURE) program and mentoring director for Harvard

Medical School's Health Professions Recruitment & Exposure Program (HPREP). When not in the research lab or pondering ways to leverage entrepreneurship to deliver innovations for the greater good, Marina can be found trying out whimsical exercise classes and working toward her next storytelling event.



**Katrina Hagedorn** (LPCE Fellow) is a Harvard College 2020 graduate who concentrated in Integrative Biology with a secondary in Energy and Environment. She acted as a content developer, Teaching Assistant, and guest lecturer for LPCE100. As a casual artist and teacher at heart, Katrina is passionate about fostering creativity to unlock innovative solutions and create social impact. She is a freelance graphic design artist and a former judge for the innovation-based Conrad Challenge China in the category Education and Technology. As a self-identifying nerd, she often reads fantasy novels, watches anime, plays ukulele, and, in general, nerds out about all things science. Currently, Katrina works at the intersection between sustainability and education as an Associate Project Coordinator for Strategic Energy Innovations, whose mission is to build leaders to drive sustainable solutions.



**Amy Shi** (LPCE Fellow) is a rising senior at Harvard University studying Molecular and Cellular Biology with a secondary in Psychology. After taking the course LPCE100, Amy became an LPCE Fellow in May of 2021. Her experience in LPCE100 inspires her to dive deeper into venture development and create opportunities for others to become involved in social entrepreneurship. She is currently working with the Innovation and Digital Health Accelerator team at Boston Children's Hospital to advance behavioral health apps and improve virtual care coordination. As a United World College (UWC) graduate, Amy is also passionate about intercultural understanding and sustainable development. On campus, she enjoys dancing with the Harvard Asian American Dance Troupe and running along the Charles River.