

# **Catalyst: Innovation in Education**

**Crowdsourced Resource Document** 

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### **About this doc**

This document contains a variety of resources (programs, organizations, articles, etc..) for students interested in exploring alternative and innovative approaches to education.

These resources were compiled for students that attended the workshop, "Thinking Like an Entrepreneur About Higher Education", run by Minerva students as a part of the 2015 Catalyst Tour. Students who were inspired by the workshop and want to dig deeper into innovative models in education are encouraged to use this document as a starting place.

## Where did these resources come from?

The resources compiled on this document were crowdsourced by students who participated in Minerva's Catalyst initiative. While we hope students find these resources helpful for exploring innovation in education, Minerva is not directly endorsing or affiliated with any of the programs, organizations, etc.. that are listed below. We encourage students to do independent research on resources of interest.

You can submit your own resources for use in this document here.





# **Organizations and Initiatives**

This section outlines organizations and initiatives that are contributing to innovation in education by providing alternative educational opportunities and/or resources.

## **Global Experience**

Name	Description	Link
Semester at Sea	University program where students travel on a ship for a semester integrating their studies with the many locations that they visit.	http://www.semesteratsea.org/
International People's College	Global cultural education experience created in the Danish folk high school tradition (note: this is not a high school program).	http://www.ipc.dk/
United World College	Global high school network offering a two year International Baccalaureate (IB) program to a diverse cross section of students, inspiring them to create a more peaceful and sustainable future.	www.uwc.org
Seamester	A 20 day, 80 day or 90 day program where 15 to 30 students work and study on a sailing yacht as they travel to a variety of locations.	http://www.seamester.com/
THINK Global School	Students immerse themselves in nine countries over three years, undertaking the International Baccalaureate (IB) examinations at the end of year three.	http://thinkglobalschool.org/
Global Citizen Year	Global Citizen Year is an award-winning, non-profit social enterprise on a mission to make it normal to choose a bridge year; an experience after high school that builds self-awareness, global skills, and grit – the foundations for success in college and beyond.	http://www.globalcitizenyear .org/
Princeton Bridge Year Program	A tuition-free program that allows a select number of incoming Princeton freshmen to begin their Princeton experience by engaging in nine months of University-sponsored service at one of five international locations.	https://www.princeton.edu/bridgeyear/
Greenheart Travel High School Abroad	Study abroad program for high school students offering semester- or year-long immersive programs with homestay and local school placement. Also offers summer programs.	http://greenhearttravel.org/p rograms/teen/high-school-a broad#destinations





IFRE Volunteers Abroad Internships	Relatively inexpensive volunteer internship opportunities with numerous date/country options.	http://www.ifrevolunteers.or g/internship/internship.php
National Security Language Initiative for Youth (NSLI-Y)	Scholarships to study language abroad. Open to American citizens under 18	http://www.nsliforyouth.org/

# **Innovative School Models**

Name	Description	Link
Minerva	Minerva is a reinvented global liberal arts program that teaches students to solve complex problems through advanced interdisciplinary learning, rigorous pedagogy, and global cultural immersion in seven world cities.	https://www.minerva.kgi.e du/
Deep Springs College	Founded in 1917, Deep Springs College is a unique institution of higher learning. The educational program is built upon three pillars: academics, self-government, and manual labor. The school is located 40 miles from Bishop, California on an isolated cattle ranch in Deep Springs Valley.	http://www.deepsprings.e du
Kaospilot	Hybrid business and design school. Teaching program is designed to help students shape the future.	http://www.kaospilot.dk/
Make School	Two-year college alternative that focuses on coding/app development. (Make School also offers a Summer Academy program).	https://www.makeschool.c om/
UnCollege	The UnCollege Gap Year Program is a supported self-directed learning experience that teaches young adults the practical skills they need to succeed today through a blended approach of self-directed learning, accountability training, mentorship, and bounded risk-taking.	http://uncollege.org/
University of Waterloo (Co-op Program)	The University of Waterloo operates the largest post secondary Co-operative (co-op) program of its kind in the world. Co-op education combines academic studies with work experience, so that students can gain real world skills, job experience, and make money during	https://uwaterloo.ca/co-op erative-education/





	their studies.	
The New School	The New School is a non-traditional university in New York City with an educational approach that focuses on engaging will critical contemporary issues, prioritizing humanity and culture in designing systems, gaining skills through project based learning, and utilizing the resources of the surrounding city.	http://www.newschool.edu
Quest University	Quest students take classes in small seminars (with 20 students or fewer), where students examine one area of human inquiry after another on a Block Plan—taking one course at a time for three-and-a-half weeks. Quest's programs are a fresh approach to the classic liberal arts and sciences by having students cross traditional boundaries and develop valued habits of mind.	http://www.questu.ca/
Olin College	Olin was founded to radically change engineering education with the goal of fueling the technical innovation needed to solve the world's complex future challenges. Olin instills passion and ignites innovation by focusing engineering students on the needs of people in the real world. This broad perspective in the hands of creative and motivated students inspires technical mastery for a purpose. Olin "engineer-innovators" envision and deliver products, services and systems that transform the way people live on this planet.	http://www.olin.edu/
LIU Global	LIU Global prepares students for a life of leadership and global engagement through a four-year degree program of study as they travel around the world. A unique college experience, LIU Global integrates a series of semester-long, in-depth engagement with world regions that culminates in a Bachelor of Arts degree in Global Studies.	http://liu.edu/Global
Eastern Mediterranean International School	Boarding high school in Israel with quotas of 20% Israeli students, 20% Palestinian students or students from other Arab countries, and 60% students from the rest of the world with a focus on peace and sustainability.	em-is.org





# **Self-Directed Learning / Open Education**

Name	Description	Link
Khan Academy	Khan Academy (KA) offers practice exercises, instructional videos, and a personalized learning dashboard that empower learners to study at their own pace in and outside of the classroom. They tackle math, science, computer programming, history, art history, economics, and more. KA has also partnered with institutions like NASA, The Museum of Modern Art, The California Academy of Sciences, and MIT to offer specialized content.	https://www.khanacadem y.org
EdX	Open source learning platform started by Harvard and MIT that offers a variety of MOOCs (Massively Open Online Courses) from top institutions.	https://www.edx.org/
Udacity	With industry giants—Google, AT&T, Facebook, Salesforce, Cloudera, etc.— Udacity offers Nanodegree programs and credentials, designed so professionals become Web Developers, Data Analysts, Mobile Developers, etc. Udacity students acquire real skills through a series of online courses and hands-on projects.	https://www.udacity.com/
Coursera	Coursera is an education platform that partners with top universities and organizations worldwide, to offer courses online for anyone to take.	https://www.coursera.org/

# Initiatives

Name	Description	Link
Thiel Fellowship	Founded by technology entrepreneur and investor Peter Thiel in 2011, the Thiel Fellowship is a two-year program for young people who want to build new things. Thiel Fellows skip or stop out of college to receive a \$100,000 grant and support from the Thiel Foundation's network of founders, investors, and scientists.	http://thielfellowship.org/
XQ Super Schools Project	The Super School Project is an open call to reimagine and design the next American high school. In towns and cities far and wide, teams will unite and take on this important work of our time: Rethinking and building schools that deeply prepare our students for the rigorous challenges of college, jobs, and life.	http://xqsuperschool.org/





American Honors	Elite community college program, getting talent and providing them with quality education. Students graduate with a community college degree and AH certificate. AH provides students with transfer assistance, and has placed graduates in schools like Stanford, Cornell, Georgetown, etc.	https://americanhonors.or g/
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## **Understanding Innovation in Education: Information Resources**

## The college experience

- Elite Colleges Don't Buy Happiness (WSJ) Gallup Survey of 30k college grads
- What Makes College Students Happy? (NYT) Longitudinal study of Hamilton grads
- <u>The Benefits of Active Learning</u> (PNAS.org)—admittedly dry, but important to understand pedagogy and failures of lecture-based courses (<u>Science Mag</u> summary of research)

## Rising cost of college

- <u>The Tuition is Too Damn High</u> (WaPo)—10-part in-depth series on why college is becoming more expensive and what we can do about it
- <u>The Supersizing of American Colleges</u> (Priceonomics blog)—shorter piece on rising cost of college
- Here's Why the College Loan Market is Entirely Insane (BusinessWeek)—to understand the rising cost of college, you need to understand student loans

#### **Admissions**

- <u>The Myth of American Meritocracy</u> (The American Conservative)—an in-depth evaluation of admissions at Ivy league schools, pointing to the argument that Asians are discriminated against
- <u>Lifting the Veil on the Holistic Process at UC Admissions</u> (NYT)—another look at the impact of race on admissions

#### **MOOC** madness

- Year of the MOOC (NYT)—this piece kicked off a wave of glowing press about Coursera, Udacity and EdX and is an effective primer for those new to the space
- <u>Is College Moving Online?</u> (New Yorker)—This is another well-written summary from one of the country's top outlets, a cousin to the above NYT piece
- Napster, Udacity and the Academy
  —Shirky is among the earliest and sharpest pundits on
  changes in higher ed. This was his first missive in the field in 2012 but is as relevant today as it
  was when he first posted.
- Your Massively Open Offline College is Broken—another great Shirky piece updating his 2012 writings.
- VCs Awful Idea About the Future of Higher Ed—as the title suggests, an anti-MOOC article anchoring the anti-MOOC backlash





<u>Udacity Pilot Learnings</u> and <u>Nanodegrees</u> (EdSurge & NYT)—the development of a MOOC provider, from replacing college to reimagining vocational training

### **General interest**

- One World Schoolhouse—Sal Khan (also see Sal's original TED talk here).
- <u>Academically Adrift</u> Richard Arum and Josipa Roksa
- <u>Business School, Disrupted</u> (NYT)—evaluating HBS's move to online education through the lens of their two most famous strategic thinkers
- <u>The Innovator's Dilemma</u> (Christensen) & <u>The Disruption Machine</u>(New Yorker)—the book that launched the modern-gospel of disruption and the recent, and controversial, New Yorker takedown
- More Clicks, Fewer Bricks
  —Intelligence Squared debate on the future of the classroom, including Minerva's founder Ben Nelson
- <u>College Unbound</u>—Jeff Selingo
- <u>Democracy and Education</u>—John Dewey
- The Uses of the University—Clark Kerr
- <u>Disrupting Ourselves</u>—Vice Provost Randy Bass at Georgetown

