"*Creativity* is thinking up new things. *Innovation* is doing new things."

— Theodore Levitt

Be creative

Brainstorm

Get unstuck

Get Inspired

Collaborate

Different perspective

Foster new ideas

How? Why? When? With Whom?



California

WOMEN IN

Embracing Innovation through Design Thinking and Citizen Science

March 12, 2014 @ Mindjet, San Francisco

Speakers

Embracing Innovation through Design Thinking and Citizen Science

March 12, 2014



Christine Kohl-Zaugg, Founder and CIO of BluBubble ckzaugg@blububbleinno.com

Christine Kohl-Zaugg is the founder of BluBubble – www.blububbleinno.com an innovation consultancy with a focus on sustainability.



Kate Bennet, Director of Product, Mindjet kbennet@mindjet.com

An award winning IT professional specializing in time-pressured project delivery, data driven and user centric product design, and leading teams to success within complex stakeholder and political environments. Significant experience across public, private and not-for-profit sectors.

Additionally responsible for co-ordinating the use of Spigit software at conferences including the World Innovation Forum and for deploying SaaS in enterprises around the world. In 2011 TechCrunch noted that one such deployment-the Innovation Launch Pad- could save the UK government £1.7 billion per annum.

Leticia Britos Cavagnaro

Deputy Director, National Center for Engineering Pathways to Innovation; Lecturer, Hasso Plattner Institute of Design (d.school)



britos@stanford.edu

Leticia Britos Cavagnaro, Ph.D., is a lecturer at the Hasso Plattner Institute of Design (d.school), where she teaches university students of all disciplines how to build their creative confidence to become engines of innovation in their own lives, and as members of teams and organizations. Leticia is the Deputy Director of the National Center for Engineering Pathways to Innovation (Epicenter).

Having witnessed the journey of Stanford students who are transformed by their experience at the d.school, bringing design thinking to more people beyond Stanford has become a priority for Leticia, and she has worked with hundreds of teachers and students of all ages, as well as corporate and non-profit leaders in the US and abroad. BluBubble uses a systematic and structured approach to successfully uncover, prioritize and develop high value ideas. Christine's multisensory, 360° BluBubble ideation workshops and tools reflect the latest findings in the ideation field and leverage research from cognitive psychology and organizational behavior.

Christine has held innovation workshops, trainings, presentations and organized best practices innovation study tours at leading companies including LinkedIn, SAP and the Food Bank – as well as at several start-ups. She is fluent in French, German and English.

Lina Nilsson

is the **Innovation Director** at the Blum Center for Developing Economies at the University of California Berkeley.

nilsson@berkeley.edu

At the Center's Development Impact Lab (DIL), she designs financial and

technical support platforms for scaling of university innovations for global impact (from 'lab bench to community'). USAID Development Lab headquartered at UC Berkeley.

Lina is a recipient of the ETH Medal and is a 2013 MIT Tech Review Innovator (TR35 under 35). She has a Dr.sc from the ETH Zurich.

"A study of the top 50 game changing innovations over a 100 year period showed that nearly 80% of those innovations were sparked by someone whose primary expertise was outside the field in which the innovation breakthrough took place." from Dan Pink's blog

Speakers



Dr. Jessica Rothenberg-Aalami,

Partner Gobee Group

jessica@gobeegroup.com

Jessica's primary focus is technology and international sustainable development and global intelligence. Through Gobee, she and her teams advise clients on the way "innovation at the margins" is redefining business, research and international exchange.

Prior to Gobee, she was a research scholar with the University of California, Berkeley Roundtable on the International Economy (BRIE) on technology innovation and global corporate social responsibility (GlobalCSR).

As a Fulbright scholar, she researched Nike's global production network. She holds a PhD in Economic Geography with a Master's degree in International Studies and an undergraduate degree in International Political Economy from the University of California, Berkeley. Her most recent book is "Technology at the Margins: How IT Meets the Needs of Emerging Markets." She speaks German, Vietnamese and English.

Yennie Lee

vennie@ideo.org

Yennie is the Program Operations Specialist for the Amplify program, at <u>IDEO.org</u>.

The Amplify program is a 5-year initiative between OpenIDEO, <u>IDEO.org</u> and the UK Department for International Development, which hopes to make international development more collaborative and human-centered.

Prior to joining <u>IDEO.org</u>, Yennie supported a team at the Bill and Melinda Gates Foundation, which focused on instructional supports and tools, aligned to the Common Core. She is a Bay Area native, and grew up in Berkeley.

Resources

Please find attached more resources. Special thanks to Leticia, Lina and Yennie for providing them.

There is also a hand-out "Executive Guide to Design Thinking" by Sue Bethanis, Mariposa Leadership Inc.



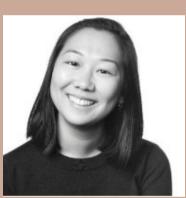
Dr. Geetha Rao VP Corporate Development, Triple Ring Technologies grau@tripleringtech.com

Geetha's focus is on emerging business challenges with high-risk technologies. She is also the founder and CEO of Technology Frontiers Collaborative, a scientific and educational non-profit. She has served on the faculty of FutureMed at Singularity University, Stanford University's Biodesign Innovation Program, and on University of Chicago's Innovation Network for the Physical Sciences Division.

She was a contributor on the 2013 World Economic Forum research project on Sustainable Health Systems, a TEDMED scholar, and has addressed numerous industry forums and the press. Geetha holds a doctorate from MIT and a masters from Stanford University's Graduate School of Business.

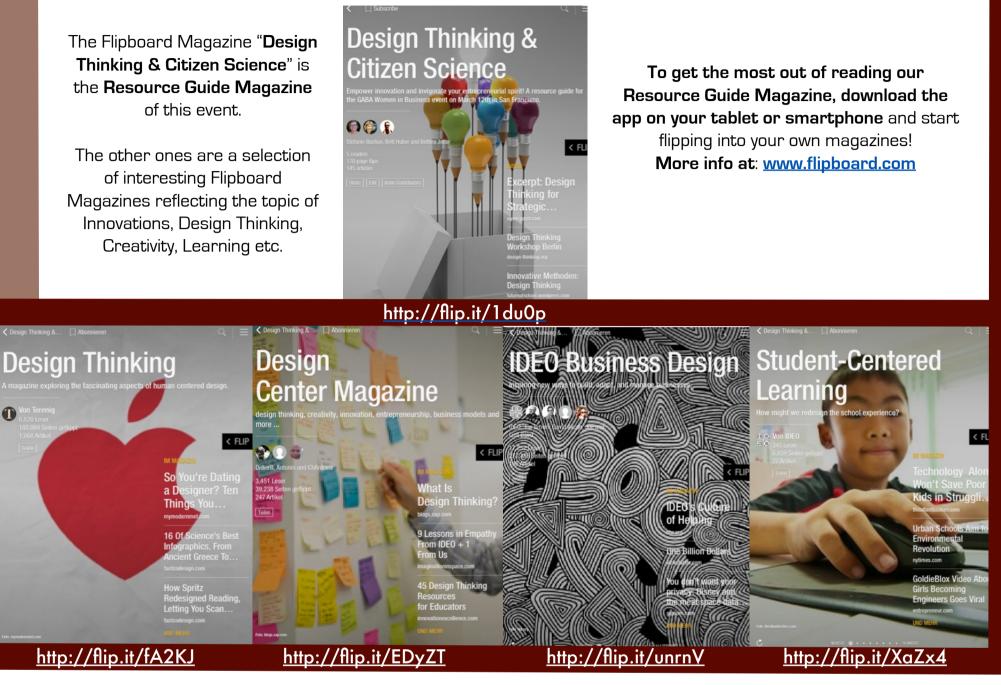
Suggested Reading

- Michael Michalko, **Thinkertoys** (TenSpeed Press, 2nd edition, 2006)
- Keri Smith, How to be an explorer of the world (Penguin Group, 2008)
- Edited by Paul Sloane, A guide to Open Innovation and Crowdsourcing – Advice from Leading Experts (KoganPage 2011)
- Vijay Kumar, 101 Design Methods A structured Approach for Driving Innovation in Your Organization (Wiley & Sons, 2013)
- David Kelley and Tom Kelley <u>Creative Confidence</u>: <u>Unleashing the Creative Potential Within Us All</u>
- Warren Berger Glimmer: How design can transform your
 life and maybe even the world
- Tom Kelley The art of innovation
- Tim Brown Change by design
- Tom Kelley <u>The Ten Faces of Innovation</u>
- Roger Martin <u>The Design of Business</u>
- Roger Martin The opposable mind
- Steve Garner, Chris Evans (Eds.)
 Design and Designing



Flipboard Magazine Resources

Flipboard is a personalized magazine app, designed for smart phones and tablets, but you can access it on a PC/Mac too. It takes stories from around the web, based on your own interests and delivers them to you in a nice visual feed. The best about it is that you can create magazines yourself and, by using the search bar, find any topic that might interest you in blogs, websites and magazines that other people have created.



"Creativity, as has been said, consists largely of rearranging what we know in order to find out what we do not know. Hence, to think creatively, we must be able to look afresh at what we normally take for granted."

– George Kneller

Thank you for joining us. Please share your experience about innovation and design thinking with your friends and colleagues.

Linked in 🛛

This list was compiled by Leticia Britos Cavagnaro, Stanford University ~2009-2014

Books:

- 1. Creative Confidence: Unleashing the Creative Potential Within Us All, David Kelley and Tom Kelley
- 2. <u>Glimmer: How design can transform your life and maybe even the world</u>, Warren Berger
- 3. <u>The art of innovation</u>, Tom Kelley
- 4. Change by design, Tim Brown
- 5. The Ten Faces of Innovation, Tom Kelley
- 6. <u>The Design of Business</u>, Roger Martin
- 7. The opposable mind, Roger Martin
- 8. <u>Design and Designing</u>, Steve Garner, <u>Chris Evans</u> (Eds.) (note: I co-wrote a chapter in this book)

Interviews:

1. Interview with David Kelley (IDEO/d.school): <u>http://www.publicschoolinsights.org/visionaries/</u> <u>DavidKelley</u>

2. Interview with Tim Brown: http://www.tcbreview.com/grand-designs.php

3. Radio interview with David Kelley:

http://kalwnews.org/audio/2009/10/15/design-thinking-ideo_13900.html

4. NYT's interview with Tim Brown:

http://www.nytimes.com/2009/10/25/business/25corner.html?_r=1&scp=1&sq=tim.brown&st=cse

5. Metropolis interview with Tim Brown: <u>http://www.metropolismag.com/story/20091021/the-making-of-a-design-thinker</u>

Talks:

1.<u>Tom Kelley</u> @ the Entrepreneurial Thought Leaders series at Stanford, 2008.

2. Tim Brown @ 2008 Serious Play conference:

http://www.youtube.com/watch?v=RjwUn-aA0VY&feature=channel

3. Tim Brown @ 2009 Commonwealth Club:

http://fora.tv/2009/11/09/Change_by_Design_Tim_Brown_of_IDEO

4."Awakening Creativity" by George Kembel (Stanford's d.school Director):

http://fora.tv/2009/08/14/George_Kembel_Awakening_Creativity

5. Fabio Sergio (Frog Design):

http://designmind.frogdesign.com/videos/on-stage/design-thinking-and-the-future.html

6. Berkeley Innovation Conference, March 2010:

http://ideas.economist.com/content/video (among other talks, "<u>The Hybrid Problem Solver</u>", panel including DK and Tim Brown).

Blogs/websites:

- 1. IDEO blog
- 2. <u>Glimmer</u> (Warren Berger's blog)
- 3. Design Thinking(Tim Brown's blog)
- 4. Bruce Nussbaum's blog
- 5. <u>Core77 magazine</u> (mainly industrial/product/experience design)

6. GOOD.is Design is a verb:

http://www.good.is/series/design-is-a-verb/

7. Jonathan Hey's blog (Jump designer): <u>http://palojono.blogspot.com/</u>

Magazine articles:

1. Fast Company-article on David Kelley.

http://www.fastcompany.com/magazine/132/a-designer-takes-on-his-biggest-challenge-ever.html including his mindmap on k-12 education:

http://www.fastcompany.com/files/feature-81-mind-map.gif

2. Tim Brown and Jocelyn Wyatt (IDEO) on DT for social innovation <u>http://www.ssireview.org/articles/</u> <u>entry/design_thinking_for_social_innovation/</u>

This list was compiled by Leticia Britos Cavagnaro, Stanford University ~2009-2014

Magazine articles:

3. IDEO's tips on creating a 21st century classroom experience (Metropolis magazine):

http://www.metropolismag.com/story/20090218/ideos-ten-tips-for-creating-a-21st-century-classroom-

<u>experience</u>

4. Design Thinking in Business Schools

http://www.nytimes.com/2010/01/10/business/10mba.html?ref=business

5. Wired UK article on IDEO:

http://www.wired.co.uk/wired-magazine/archive/2009/12/features/reinventing-british-manners,-the-post-it-way.aspx

6. <u>http://emergentbydesign.com/2010/01/14/what-is-design-thinking-really/</u>

7. The Empathy Economy http://www.businessweek.com/bwdaily/dnflash/mar2005/nf2005037_4086.htm

Toolkits:

 IDEO's Human Centered Design toolkit: <u>http://www.ideo.com/work/item/human-centered-design-toolkit/</u>
 IDEO's Design Thinking for Educators toolkit: <u>http://designthinkingforeducators.com/</u>

Blog posts:

 Great blog posts.
 Great blog post by the principal of Frog Design. <u>http://www.good.is/post/the-importance-of-right-brain-thinking-in-education?</u> <u>utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+good%2Flbvp+%28GOOD+Main</u> <u>+RSS+Feed%29</u>
 Jocelyn Wyatt (has a good example of prototyping for Kickstart):

http://blog.acumenfund.org/2008/06/23/design-for-social-impact-what-does-it-mean-and-why-should-wecare/

Other

1. Bruce Mau's Incomplete Manifesto for Growth: <u>http://www.brucemaudesign.com/4817/112450/work/</u> incomplete-manifesto-for-growth

2. Bruce Mau's Institute Without Boundaries.

Articles/resources on designing "for the other 90%":

1.<u>http://ambidextrousmag.org/issues/09/article.php?i9p35_37</u>

2.<u>https://client.ideo.com/rippleeffect/workshop/materials.html</u>

3.<u>http://www.projecthdesign.org/projects.html</u>

Selected resources from above that are relevant to K-12 education space:

1. Tom Kelley's talk at Stanford Entrepreneurial Thought Leader Series 2008: <u>http://ecorner.stanford.edu/</u> authorMaterialInfo.html?mid=2054

2. Interview with David Kelley (IDEO/d.school): <u>http://www.publicschoolinsights.org/visionaries/DavidKelley</u>

3. Studio H: <u>http://www.studio-h.org/</u>

4. IDEO's tips on creating a 21st century classroom experience (Metropolis magazine): <u>http://</u><u>www.metropolismag.com/story/20090218/ideos-ten-tips-for-creating-a-21st-century-classroom-experience</u>

5. David Kelley's mindmap on K-12 education: <u>http://www.fastcompany.com/files/feature-81-mind-map.gif</u>

This list was compiled by Leticia Britos Cavagnaro, Stanford University ~2009-2014

Selected resources from above that are relevant to K-12 education space:

6. The Importance of Right-brain Thinking in Education: http://www.good.is/post/the-importance-of-right-brain-thinking-in-education? utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+good%2Flbvp+%28GOOD+Main +RSS+Feed%29

7. Bruce Mau's Incomplete Manifesto for Growth: <u>http://www.brucemaudesign.com/4817/112450/work/incomplete-manifesto-for-growth</u>

8. "Awakening Creativity" by George Kembel (Stanford's d.school Director): <u>http://fora.tv/2009/08/14/</u> <u>George Kembel Awakening Creativity</u>

Following list was compiled by Lina Nilsson, Dr. sc.

http://www.innocentive.com/

A large online platform where you can crowdsourcing innovation solutions in science and technology. Is well connected with these communities through Nature (the leading science journal), Scientific American and others.

http://www.quirky.com/

If you have the product idea but not the company: quirky is an open-source invention and product development company.

http://scistarter.com/ One of the best known aggregate portals to citizen science projects

www.zooniverse.org

Portal to citizen science projects with over 1 million contributors.

This list was compiled by Yennie Lee, IDEO.org

<u>IDEO.org</u> is a non-profit organization that seeks to tackle the most persistent problems of global poverty through human-centered design. It grew from a growing need for social innovation, which IDEO has been working on for many years already.

The <u>Amplify program</u> is a five-year initiative between <u>IDEO.org</u>, OpenIDEO and the <u>UK Department for</u> <u>International Development</u> (DFID), which seeks to make international development more collaborative and human-centered. Through 10 Design Challenges, we are bringing together new voices and perspectives on what promising solutions there might be to address global poverty. Its <u>first Design Challenge</u> seeks to answer this question: How might we make low-income urban areas safer and more empowering for women and girls?

<u>OpenIDEO</u> is an open innovation platform, which brings together over 50,000 community members in the pursuit of social good. Now celebrating its third year, OpenIDEO has tackled challenges around global health, international human rights, and most recently, <u>#creativeconfidence</u>.

<u>HCD Connect</u> is an online community that brings together users around the human-centered design process, specifically in its application to the social sector. You can find tools, methods, and other users to learn more about its applications and to share results from a vibrant community from across the world.