# Maker Educator Convening

Forging Connections: Deepening the Collective Impact of Maker Education

May 17 - 18, 2016

The Crucible Oakland, CA



# **Maker Educator Convening**

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#### **About Maker Ed**

Maker Ed is a nonprofit organization that provides educators with the training, resources, and community of support they need to facilitate engaging, inclusive, and motivating learning experiences with youth. Through a focus on maker education – which is hands-on, youth-driven, and open-ended – Maker Ed offers educators an approach that is easily accessible, widely applicable, and highly adaptable to their unique needs. By supporting maker education, Maker Ed plays a national leadership role in both broadening access to and deepening the impact of maker education for youth. Through working with educators, Maker Ed's programs reached about 250,000 youth and families in 2015.

### **Convening Goals**

- Connect formal & informal educators from across the country
- Understand and strengthen the impact of maker education
- Provide opportunities for collaboration, mentoring, and hands-on making
- Map the maker educator network
- Demonstrate best practices for facilitating maker projects

# **Convening Agenda**

Wednesday, May	17th, 2016
8:00 AM - 9:00 AM	Breakfast & Registration
	Thank you to our sponsors: Bill & Melinda Gates Foundation, Chevron, Makey Makey, and Galileo Camps
9:00 AM - 10:15 AM	Welcome, Keynote and Q&A
	Welcome - Trey Lathe, <u>Maker Ed</u> & David Miller, <u>The</u> <u>Crucible</u>
	Keynote - Nichole Pinkard, DePaul University, <u>Digital</u> <u>Youth Network</u> , <i>Increasing Onramps for Educators and Youth: Deepening the Impact of Maker Education by Bridging Learning Frameworks</i>
10:15 AM - 11:15 AM	Mapping the Maker Educator Network
	Danny Kirk, <u>Maker Ed</u> Steve Davee, <u>Maker Ed</u>
11:15 PM - 12:15 PM	Deepening the Impact of Maker Education Panel
	Moderator: Stephanie Chang, Maker Ed
	Panelists John Christensen, Maker Lab at the Harold Washington Library Christina Jenkins, Project H Pam Moran, Albemarle County Public Schools Robbie Torney, Lodestar S. Craig Watkins, The University of Texas at Austin David Wells, New York Hall of Science
2:15 PM - 1:30 PM	Boxed Lunch & Networking

#### 1:15 PM - 2:30 PM Demos

#### **Main Floor**

- Kristin Berbawy, <u>Irvington High School</u>
- Nicholas Cole-Farrell, <u>Brandeis School of San Francisco</u>
- Doug Ferguson, Kent School District
- Sam King, SVMakerkids
- Jess Lura, Bullis Charter School
- Sarah O'Rourke, Autodesk
- Bridget Rigby, The Tech Museum of Innovation
- Jean Ryoo & Michelle Choi, The Exploratorium
- Gina Silveira & Will Hart, Piner-Olivet Unified School District
- Casey Shea, Sonoma COE
- Mary Glendening, Middletown Free Library
- Christine Mytko, <u>Black Pine Circle School</u>

#### **Upstairs**

- Dan Blake, Matt O'Donnell, Sonoma COE
- Jacie Hood, Fort Worth Museum of Science and History
- Michael Hyde, <u>Tinkercamp</u>
- Carinne Paddock, Oak Grove Elementary
- Lisa Regalla, <u>Bay Area Discovery Museum</u>
- Nora Peters, Millvale Community Library
- Jake Wheadon, Next Thing Co.
- Melissa Becker, Meadow Elementary

#### 2:30 PM - 3:30 PM Ignite Talks

- Trey Lathe, *Impact of Community*
- Karen Wilkinson, Making as the 21st Century Skill
- S. Craig Watkins, Why Making Matters
- Christina Jenkins, For the Why
- Steve Isaacs, From "Show and Tell" to "Make and Share:" Embracing Student Expertise
- Danielle Martin, Volunteers Start Making!?
- Kyle Metzner, Mind the (Relevance) Gap
- Liz Whitewolf, Teachers as Learners: Creating Effective Maker PD Sessions
- Brooke Toczylowski, Making Pathways to Systems Thinking
- Micah Lande, Making Engineers

4:45 PM - 5:30 PM	Next Steps & Closing Remarks	
	Steve Davee, <u>Maker Ed</u> Stephanie Chang, <u>Maker Ed</u>	
3:45 PM - 4:45 PM	The Power of Language: Facilitating Making & Learning	
3:30 PM - 3:45 PM	Break & Snacks	



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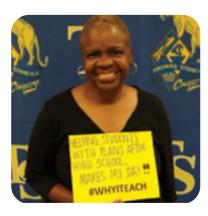


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## **EXPLORE** THE COMMUNITY

Visit www.Teacher2Teacher.education to find inspiration, opportunities, activities, and ideas from fellow teachers and our education partners.

One resource to check out is the #whyiteach storytelling toolkit at goo.gl/OBDeuX. Download the toolkit to start a storytelling project with teachers at your own school.





"The most reliable resource I've ever found is other teachers. Teacher2Teacher connects me to other teachers. It's an easy way to find solutions and get ready-to-use tools for your classroom."

- Starr Sackstein

## **Speaker Bios**



#### **Dale Dougherty**

Dale Dougherty is the founder and CEO of Maker Media based in San Francisco, CA and Board Chairman of the Maker Education Initiative. He created MAKE: magazine, which launched in 2005, and Maker Faire, which first started in the Bay Area in 2006. In 2015, there were 150+ Maker Faires around the world, including large ones in San Francisco Bay Area, New York, Rome, Tokyo and Shenzhen. He is passionate about fostering a new generation of 'makers' who are creative, innovative, and curious. On November 3, 2011, the White House recognized Dale as one of the "Champions of Change: Make It In America," for his work in helping to create high-quality jobs in the United States.



#### **Trey Lathe**

Trey Lathe joined Maker Ed as Executive Director in October 2014. He received his PhD in molecular biology in 1997, and after four years of genomics research at the European Molecular Biology Laboratory in Heidelberg Germany, started the company OpenHelix. In 2012, Trey became an American Association for the Advancement of Science (AAAS) Fellow at the National Science Foundation. In this role, he worked to broaden participation of women and underrepresented minorities in the computer and technology fields. Additionally, Trey served as co-chair for both the first D.C. Mini-Maker Faire and the "Making Education Great" symposium.



#### **David Miller**

David Miller spent a decade helping to build a mathematics education company that provided training and support for teachers. During his tenure it nearly tripled in size and was eventually sold to Scholastic, Inc. David also served as Managing Director of Focus on Film—a Hong Kong based education non-profit that provided opportunities in creative expression to hundreds of youth. As the Executive Director of The Crucible, he has guided the organization through the creation of a new strategic plan, completed a major database migration, and has helped bring rhythm and organizational structure to the 5000 students, 250 faculty, 30 staff, and hundreds of volunteers, artists, and neighbors who make up The Crucible community.



#### **Nichole Pinkard**

Nichole Pinkard is an Associate Professor in the College of Computing and Digital Media at DePaul University in Chicago. She is the founder of Digital Youth Network, co-founder of Inquirium LLC and Remix Learning, home of iRemix, a social learning platform that connects youth's learning opportunities in school, home, and beyond. In collaboration with the Chicago Public Library, Dr. Pinkard helped found YOUmedia, a public learning space that immerses high school students in a context of traditional media – books – to make and produce new media artifacts like music, games, videos, and virtual worlds.

## **Panelist Bios**



#### John Christensen

John Christensen has been a librarian at Chicago Public Library for over two decades and is excited to be a part of the Maker Lab at Harold Washington Library! In the lab, people are introduced to design using free software, and fabrication using technologies which are now becoming widely available to the public such as 3D printers, laser cutters and CNC routers. They're also working to connect people to the maker movement in the Chicago area and online.



#### Christina Jenkins

Christina Jenkins is a teacher and designer who developed her practice over nearly ten years in New York City classrooms. She launched a middle school technology program featured by PBS Frontline, and later taught interdisciplinary courses ranging from anthropology to cartography at the NYC iSchool. She is a Fund for Teachers fellow, an Academy for Teachers fellow, and a Blackboard award recipient, and has spoken widely about her work. She made an extremely popular animation about Kumon, and wrote a mini-comic about the time during her first year of teaching that she saw Picasso's Dora Maar au Chat sell for \$95 million at Sotheby's. She's studying computer science and has a lifelong love of classical piano.



#### Pam Moran

Dr. Pamela Moran has served as the Superintendent of Albemarle County Public Schools since January 2006. She oversees a division with an annual operating budget of \$160 million, with more than 1,200 teachers educating over 13,600 students in 26 schools. During Dr. Moran's tenure, Albemarle County Public Schools has become one of the top performing school divisions in the state with an on-time graduation rate of 93 percent. The performance of its students on Advanced Placement tests ranks the division in the top three percent of all school divisions in the U.S. and Canada, according to a recent report by the College Board.



#### **Robbie Torney**

Robbie is a kindergarten teacher in Oakland, California. This year, he is working as part of a team that is designing Lodestar, a new school that will open in East Oakland in August 2016 with a next-generation model built around agency, making, and projects with real world impact. As a teacher, Robbie has consistently demonstrated what high expectations can do for our youngest students, with particular focus on 21st century skills: making, communication, design, programming, and self-directed learning. Robbie received his BA from Stanford University in Political Theory and his MA from the Stanford Graduate School of Education. He is a GO Teacher Policy Fellow and an America Achieves Teacher Fellow.



#### S. Craig Watkins

S. Craig Watkins studies young people's social and digital media behaviors, innovation, and shifts in the knowledge economy with a primary focus on issues related to equity. He is a Professor at the University of Texas, Austin, in the department of Radio-Television-Film. Craig has been a Faculty Fellow for the Division of Diversity and Community Engagement at the University of Texas at Austin. He received his PhD from the University of Michigan. Craig is a member of the MacArthur Foundation's Connected Learning Research Network, and the author of three books.



#### **David Wells**

David Wells, is Director of Maker Programs at the New York Hall of Science. He oversees the design and implementation of maker related programs which engage families, students and visitors of all ages, as well as maker education initiatives that use local artists & makers as guest facilitators. A self proclaimed "maker of things", David also designs site specific interactive art installations using discarded technology, audio experimentation and digital media. During his time at NYSCI he has worked on a wide variety of projects including designing exhibits for the Early Childhood space, developing emergent curriculum for educational programming and creating educational videos for teachers and students. He received his BFA from F.I.T. and a Masters in Museum Education from Bank Street.



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## **Map of The Crucible**



## **Notes**



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