

# **Tinkering as a Mode of Knowledge Production**

## **Summit on Tinkering in Libraries and Museums**

Organized and Facilitated by Anne Balsamo

With support from the John D. and Catherine T. MacArthur Foundation

Held at the Carnegie Foundation for the Advancement of Teaching, Stanford University, Oct 2008.

### **CONCEPTUAL OVERVIEW OF OBJECTIVES AND QUESTIONS**

- Introduction: Project background
- Brief summary of Anne Balsamo's MacArthur foundation grant: "Inspiring the Technological Imagination: The use of digital media in museums and libraries."
- Context for Discussion about Tinkering
  - Historical shifts in how people learn in a networked culture
- Development of list of 21st Century Literacies
- What is the role of MAKING in contemporary digital/consumer culture?
- Amateur versus professional making practices
  - Cultural work of "Tinkering" in contemporary (consumer) culture?
- Purpose of this convening/schedule
  - NOT to exhaustively define tinkering as distinct from other practices
  - NOT to disqualify practices as "unworthy"
- What is tinkering?
  - Present a draft of taxonomy of tinkering practices that form a spectrum of interactivity/creativity
- Claims about Tinkering: Have the group generate/debate claims
- Specific considerations for this project
  - Are there preconditions for Tinkering to take place?
  - If we understand Tinkering as a social/communal practice, what is required?
  - How do you teach Tinkering?
  - How do you make it safe, persistence, liability, documentation?
  - How to embed Tinkering within informal learning spaces?
  - How to encourage the values of Tinkering (open ended) when there are specific learning objectives?
- Focus of this grant is the possibilities for tinkering in libraries and museums
  - Current examples of Tinkering Protocols and Spaces:
    - Onsite tinkering spaces
    - Online tinkering sites
    - Best practices from Museums
    - Best practices from Libraries
- Presentation of 3 library ideas
  - Book clubs of the future: Rap the book
  - Interactive toy lending

- Scratch Clubhouses
- Presentation of 3 museum ideas
  - Mobile Tinker Labs
  - Tinkerer's Round Up (TinkerMeet)
  - Tinkerer's Showcase
- Next steps

## **SPECIFIC AGENDA**

“Tinkering as a Mode of Knowledge Production in a Digital Age”

Friday, October 24, 2008

- 9:30 am      Breakfast and Name Tag Project  
Participant introductions
- 10:00 am      Welcome: Connie Yowell, MacArthur Foundation
- 10:15 am      Session 1: Anne Balsamo  
“Working the Paradigm Shift: The Technological Imagination at Work”
- 11:15 am      Session 2: Perry Hoberman and Anne Balsamo  
“A Taxonomy of Tinkering”
- 12:00      Lunch and Walking
- 1:30 pm      Session 3: Mitch Resnick  
“Designing for Tinkering”
- 3:30 pm      Session 4: TJ McLeish  
“Thinking Spaces and the Public Library”
- 5:00 pm      Wrap-up Discussion: Tinkering as a 21<sup>st</sup> Century Literacy
- 7:15 pm      Reception at the TechShop, Menlo Park

Saturday, October 25<sup>th</sup>

- 9:45 am      Session 5: Eric Siegel, Karen Wilkinson, Mike Petrich  
“Tinkering in the Museum Context”
- 11:15 am      Wrap-up Discussion: Best Practices and Possibilities

## **PARTICIPANTS**

Mark Allen  
(Machine Project and Pomona State University)

Philippe Aloub  
(Robot Village NY)

Anne Balsamo  
Interactive Media, SCA, USC

Susana Bautista  
RA, Tangible Culture Investigation Project, SCA, USC

John Brennan  
RA, Tangible Culture Investigation Project, SCA, USC

Karen Brennan  
RA, Lifelong Kindergarten, Media Lab, MIT

Tony Bryk  
Carnegie Foundation, Stanford

Michael Carter  
(MITE)

Alison Clark  
(Seedbed Initiative, NSCA @ UIUC)

Jaime Cortez  
(Independent Artist and Educator, San Francisco)

Sean Dockray  
(Telic Arts Exchange, LA)

Dale Dougherty  
(Make Magazine)

Mark Hatch  
TechShop, Menlo Park

Perry Hoberman  
Interactive Media, SCA, USC

Wendy Ju  
Center for Design Research, Stanford University

Mike Kuniavsky

Adaptive Path, ThingM

Dale MacDonald  
Onomy Labs, Menlo Park

TJ McLeish  
Thinkering Space, IIT)

Scott Minneman  
Onomy Labs, Menlo Park

Alex Pang  
Institute for the Future, Palo Alto

Roy Pea  
Stanford University

Mike Petrich  
Exploratorium, SF

Rick Prelinger  
The Prelinger Library and Archive

Douglas Repetto  
Computer Music Center, Columbia U, Dorkbot and Artbots

Mitch Resnick  
Lifelong Kindergarten at Media Lab, MIT

Ruth Rominger  
Monterrey Institute for Technology in Education

John Seely Brown  
Chief of Confusion

Eric Siegel  
New York Hall of Science, Queens

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Museum 2.0 and Tech Musuem, SJ

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