

### Making is <u>the</u> 21<sup>st</sup> Century Skill (psst it's all about Community)

Jessica K. Parker, Education Community Manager jessica@makered.org MakerEd.org | @MakerEdOrg | @JessicaKParker

# Making is the act of creating





# Maker Education

### Approach

Interactive

#### Outcome

Diverse skills

Open Ended

Knowledge

- Process Driven
- Ways of thinking







#### 21<sup>st</sup> Century Skills

- learning to learn
  - self-directed
- problem solve
  - take risks
- build on ideas
  - collaborate
- failure as opportunity
  - seek resources
    - persist

# Making as the 21st Century Skill

#### Social and Emotional Learning

- openness to struggle & collaboration
- seeking resources & mining the wisdom of the room

#### Value in Process

- o brainstorming and tinkering
- o iterating, building on ideas

#### • Reflection

- $\circ~$  understand strengthens & areas of growth as a learner
- o learning how to learn





# Community of Learners

Photo: The Bubbler

# Perceptions of Maker Ed Community



(n=293)

- Generosity / willingness to share
- Sense of community
- Openness
- Creativity and innovation
- Passion
- Feeling of not being alone
- Friendly / welcoming

## **Characteristics of Maker Communities**



Photo: Maker Ed

Membership & Mentorship

Intergenerational

Individual & collaborative practices

Ethos of documenting, sharing, and giving/ receiving feedback

# **Maker Educator Learning**



Deeper understanding of students and their needs and interests

Reinvigorated/ Renewed

Change in practice: hands-on, studentdirected, complex assessments Maker Ed

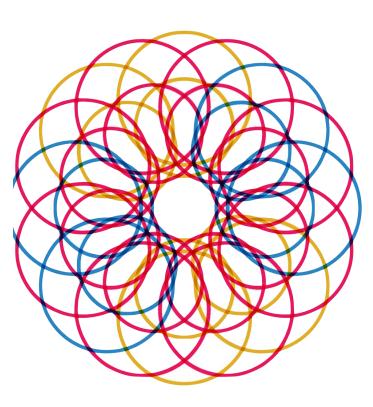
Photo: Maker Certificate Program at Sonoma State

#### LEARNING IS A LIFESTYLE connected to **IDENTITY**

Slide from Nichole Pinkard's talk about the **Digital Youth Divas** program in Chicago

Built into the fabric Equity Diversity Identity Community of a makerspace...

# Partner to Strengthen the Network



# Brainstorming & Designing Activities



#### **Brainstorm and Discuss:**

- Is there anything that you'd really love to build, make, and/or invent?
- In what ways do you enjoy helping people the most?
- Think about your favorite space (a room in your home or even a space outside). Why is it your favorite? What do you like about it?

#### Purpose

- What are your program goals or goals of your maker space?
- · What does success for these goals look like?
- How do you measure success?
- What is the audience that your program or space serves?
- What are the values that underlie your program or space?

#### People

- What roles do people play
  to support your program or space?
- What is the staffing structure that will support your program or space?
- What is your approach to facilitating the making learning experiences? Why?
- Can you assess your staff's capacity to support making?
- What strategies can be employed to ensure that staff's capacity is developed over time?

#### **Pieces & Parts**

- What tools are important for your maker experiences? Why?
- What materials are important for your maker experiences? Why?
- What physical architecture is conducive for the purpose of your maker experiences? Why?
- What processes or functions are important to integrate in your maker experiences? Why?

#### Topics & Questions (Overlap / Interplay):

- Design
- Reflection & PD
- Evaluation

https://makingandlearning.squarespace.com/about/

#### 5 APPENDIX A

#### APPENDIX A MAKERSPACE PLANNING SHEET

	How do I imagine it being used? What do I hope to achieve?	What do I already have?	What do I still need? (Why do I need it?)	How do I get it? (From where or whom? When? At what cost?)
SPACE				
Think of the physical space as well as the at- mosphere or environment you are trying to create.				
MATERIALS & TOOLS				
Consider whether or not each item will need to be maintained or replenished.				
PEOPLE				
Mentors, staff, volunteers, community partners, youth, etc.				

List some of the key takeaways from your interviews with youth.

Based on your youth's interest and the information in this table, brainstorm some project ideas for your space!

http://makered.org/resources/spaces-places/

# Thank You

Jessica K. Parker jessica@makered.org <u>MakerEd.org</u> @MakerEdOrg | @JessicaKParker

