Building STEAM with Día: The Whys and Hows to Getting Started

Amy Koester | March 2015
Hello! I’m Amy.

- Youth & Family Program Coordinator, Skokie Public Library
- The Show Me Librarian
- ALSC Public Awareness Committee
- Building STEAM with Día Toolkit
On Our Agenda

• What is STEAM, and how does diversity fit into the conversation?

• Sample Programs by Age

• Five Tips for Diverse STEAM Programs

• Resources & Questions
What is STEAM, and how does diversity fit into the conversation?
STEAM Timeline

- 1983 - *Educating Americans for the 21st Century*  
  (National Science Board Commission on Precollege Education in Mathematics, Science, and Technology)
STEAM Timeline


- 1989 - Education Summit convened by President George H.W. Bush
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- **1994** - Goals 2000: Educate America signed into law by President Bill Clinton
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• 1994 - Goals 2000: Educate America signed into law by President Bill Clinton

• 2001 - No Child Left Behind signed into law by President George W. Bush
• 2002 - “Teach arts and sciences together” TED Talk by Mae Jemison
STEAM Timeline (cont.)

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- 2007 - *Rising Above the Gathering Storm* (National Academy of Sciences, National Academy of Engineering, and Institute of Medicine)
STEAM Timeline (cont.)

- 2002 - “Teach arts and sciences together” TED Talk by Mae Jemison
- 2007 - *Rising Above the Gathering Storm* (National Academy of Sciences, National Academy of Engineering, and Institute of Medicine)
- 2011 - *Expanding Underrepresented Minority Participation: American’s Science and Technology Talent at the Crossroads* (National Academy of Sciences, National Academy of Engineering, and Institute of Medicine)
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• Minorities are underrepresented in STEM fields.
• Minorities are underrepresented in STEM education.
• Minority students’ STEM test scores are consistently below their white peers’.
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- It’s not about aptitude. It’s about:
  - Preparation
  - Access
  - Motivation
Preparation = Early Exposure
Access =

Plentiful & Rich Options
Motivation =
Interest-building & Relevant
Sample Programs by Age
Shapes We Eat: Preschool

- 20-30 minutes
- *Round is a Tortilla* and talking about foods we love
- Measuring ingredients & making play dough
- “Cooking” our favorite foods
- Other diverse food titles on display
Moon Myths & Science: K—2nd grade

- 30-45 minutes
- Talk about history of science (technology/pre-technology)
- Tell or read moon myths & discuss
- Watch a video about moon phases
- Recreate the phases of the moon with sandwich cookies
Taste Explorations: 3rd—5th grade

- 45-60 minutes
- Invite a chef/cook/baker to talk about the science and importance of taste
- Taste map of the tongue
- Potato chip taste tests
- Candy taste tests
- Discuss likes, dislikes, surprises
Highlights Map of the Library: 6th—8th grade

• 60-90 minutes

• Look at a traditional map of the library

• Groups brainstorm their personal library highlights for middle schoolers, then take digital photos

• Create a digital map of the library with the photos and commentary
Five Tips for Diverse STEAM Programs

1. Make it engaging & participatory.
2. Make it motivating.
3. Highlight diverse STEAM.
4. Use all resources available.
5. Create partnerships & collaborations.
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Resources

- Building STEAM with Día book lists (out now)
- Building STEAM with Día Toolkit (forthcoming)
- Día Program Registry
- SLJ’s STEAM board on Pinterest
- Your Stacks
- Your Customers
Questions?
Let’s chat!

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