STEAM YOUR LIBRARY

From Storytimes to Tweens --
Strategies for Incorporating STEAM in Programs
HELLO!

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1. WHY S.T.E.A.M.?
Guiding Principles for the Development of the NYS Prekindergarten Foundation to the Common Core

- Children are active learners
- The family is a significant contributor to children’s learning and development
- Children learn in context
- Early learning and development are multidimensional

NEW YORK STATE
Department of Education
NEXT GENERATION STANDARDS

- Emphasizes the reading of informational texts alongside literature
- Emphasizes reading comprehension skills particular to information text beginning on the pre-K level

21st Century Skills

Figure 1 - P21 Framework for 21st Century Learning
## 21st Century Skills

### Learning and Innovation "The 4 C's"

<table>
<thead>
<tr>
<th>Skills</th>
<th>Digital Literacy</th>
<th>Career and Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical thinking &amp; problem solving</td>
<td>Information literacy</td>
<td>Flexibility &amp; adaptability</td>
</tr>
<tr>
<td>Creativity and innovation</td>
<td>Media Literacy</td>
<td>Initiative &amp; self-direction</td>
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<tr>
<td>Communication</td>
<td>ICT Literacy</td>
<td>Social &amp; cross-cultural interaction</td>
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<td>Collaboration</td>
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<td>Productivity &amp; Accountability</td>
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<td></td>
<td></td>
<td>Leadership &amp; responsibility</td>
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</tbody>
</table>

Table 1 - P21 Skills

For more on 21st Century Skills go to [http://www.nea.org/home/34888.htm](http://www.nea.org/home/34888.htm)
STEAM is fun!
STEAM...
Can help you brand your programs
Patrons know what to expect
2. **PAJAMA SCIENCE STORYTIME**

AGES 3-5 YEARS
Pajama Science Storytime

HARVEST MOON

- So That’s How the Moon Changes Shape (Fowler)
- Possum’s Harvest Moon (Hunter)
- Revolution/Rotation rhyme

Puffy Paint Moon

Moon Sand and Galaxy Dough

Moon Phases Wreath
Pajama Science Storytime

COLORS

Vinegar and Baking Soda

Books and crafts

Colored Glycine “glasses”
Pajama Science Storytime

DINOSAURS

- Stations included -- macaroni dinosaurs; make your own fossil; play station with dinosaur dig and matching game
- *How tall was a T. Rex?* (Limentani)
- *Dinosaur vs. Bedtime* (Shea)

**Make Your Own Fossil**

**Macaroni Dinosaurs**

**Dinosaur Dig**
3. ELEMENTARY STORYTIME
FAIRYTALE STORYTIME
GRADES K-2\textsuperscript{ND}
STREGA NONA

Elementary Storytime

» Use STEAM activities within traditional storytimes
» Use informational texts
» Multimedia

GIANT SQUID
Fairytale Storytime
Reader’s Theater Program

THREE LITTLE PIGS

THREE BILLY GOATS GRUFF

THE BREMEN TOWN MUSICIANS
4. **TWEEN MAKER**

**GRADES 3\textsuperscript{RD} - 6\textsuperscript{TH}**
Tween Maker

ENGINEERING

Art Bot

Bridges

STEAM Boats

Catapults
OUR MAKERSPACE

Tech Tubs

3D Printers

MakerBot Catalog: Premade 3D Files

3Doodlers

Button Maker
Tween Maker

TWEEN TECH

Makey Makey

Button Maker

Bloxels

3Doodlers
Tween Maker

TWEEN MAKER

Duct Tape Crafts

3D Printer and 3Doodlers

Little Bits
4. CONCLUSION
STEAM YOUR LIBRARY

PJ Science Storytime
- Active learning
- Parental involvement
- Stimulate children’s learning in a sensory environment
- Wear PJs!

Elementary & Fairytale Storytime
- Incorporates STEAM into traditional storytimes.
- Multidimensional approaches to text
- Incorporate non-fiction

Tween Maker
- Branding
- Evolution of program
- Self-direction & collaboration
- Stimulating creativity
What we hope you take away...

- Keep trying new things.
- Incorporate what your library has that kids aren’t utilizing.
- If you build it they will come. It takes time to build an audience.
- Be creative! If you’re having fun, they’re having fun.
THANKS!

Any questions?

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