



GOLD IS THE NEW PINK

GoldieBlox & STEAM Programming for Girls from Idea to Reality



WHY IS THIS IMPORTANT?

Girls can come to LEGO clubs & such already, right?

"Girls...are also underrepresented in science classes, clubs, events, careers, and leisure pursuits (Calabrese Barton & Brickhouse, 2006; Breakwell & Beardsell, 2007; National Girls Collaborative Project, <http://www.ngcproject.org/>; Bell, Lewenstein, Shouse, & Feder, 2009).

...

Inequitable opportunities for girls to participate in science have been documented in schools, in programs outside of school, and even in the differential treatment by a parent or guardian at home. Examples of gender inequity are abundant in school texts and children's books and movies, classroom experiences, exposure to science toys, and other science-related experiences."

-McCready, D., Dierking, L. (2013) Cascading Influences: Long-Term Impacts of Informal STEM Experiences for Girls

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**LEGO are AWESOME. But, "Construction toys develop an early interest in these subjects, but for over a hundred years, they've been considered 'boys' toys."
(GoldieBlox.com, 2016)**





GOLD IS THE NEW PINK: GOLDIEBLOX ENGINEERING CLUB

Chesterfield

DECISIONS

- Did NOT say in the club name that it was expressly for girls
- Bought enough sets for groups of 3-4 kids
- Allowed 'free time' at the end for additional play
- Encouraged kids to find solutions & tinker (this meant not hovering if they weren't following instructions!)



"Most people associate science and math fields with "male" and humanities and arts fields with 'female,' Implicit bias is common, even among individuals who actively reject these stereotypes"

- 'Hill, C., Corbett, C., & Rose, A. (2010). Why So Few: Women in Science, Technology, Engineering and Mathematics



LEGO/building toys are often *seen* as "boy toys" so LEGO programming may be seen as boy programming by default too



Does your little princess want to build her own castle?

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MARKETING SOLUTION: USE PINK. PINK IS GENDERED BUT SENT A MESSAGE & FLIPPED THE STEREOTYPE WITH ITS MESSAGE



PATRON FEEDBACK

- **"This is a good activity to help girls with sneaky science."**
- **"Outstanding! I'm so grateful and my children LOVED the building today. Very challenging. Gave them an opportunity to problem solve and discover."**
- **"Great engineering program. Kids should be able to take it home."**
- **Robotics team coach was very interested in future involvement to look out for girls who would be interested in team later**
- **Mom of boy very happy we encouraged him to attend when he showed interest**

LESSONS

- **Build a kit ahead of time to be familiar with construction**
- **Limit program size if you don't have funds to have a 1:1 kid-to-kit ratio**
- **Open registration for following month's program the day of the current to encourage on-the-spot registration (one less thing for parents to remember on the to-do list!)**
- **Send less expensive kits home (mini-kits harder to re-use)**
- **If a kid shows interest, encourage them to attend (while club may appeal to one sex, all genders were welcomed)**

Girls Only Book Club
Grade Levels 2-5

GIRLS ONLY BOOK CLUB

Wednesday, February 3rd 4-5 PM
Roanoke

Registration Required. Call 853-2955.

ROANOKE PUBLIC LIBRARIES
ENGAGE
EDUCATE
EMPOWER
THE POSSIBILITIES ARE

DECISIONS

- Club description did say it was expressly for girls
- Monthly themes focused on topics like diversity, biology, and topics beyond chick-lit and traditional "girl book" topics (e.g. unicorns -- despite the girly branding!)

PATRON FEEDBACK

- **Parents reported it was a valuable experience for their daughters**
- **When club went away during branch renovation parents were eager for it to return and asked about it**

LESSONS

- **At first the book club was too much like school**
- **Give girls power and ownership over club and they will thrive -- foster independence, allow them to choose specific titles**
- **Wish we'd had a more formal partnership with girl-centric organizations (ex. Girl Scouts) that would have provided an automatic audience, more incentives to attend; was approached later by nonprofits who saw Girls Only Book Club and wanted to get more involved. This provided a stepping stone for the future.**



SO WHAT?

This stuff is little-picture. Let's talk big picture, now.

LIBRARIES NOW

- 3D printing
- Community gathering spaces
- Literacy-based programs
- LEGO programs
- Planting seeds in the garden of tomorrow so that.....

LIBRARIES TOMORROW

1. Programs that appeal to specific groups in the community that have needs (e.g. girls who lack sophisticated STEAM programs)
2. Classes for youths focused on aspects of social activism, not just fun & games & technical know-how (e.g. zine programs)
3. Rooted in the community in more diverse ways
4. Known as STEAM leaders in their communities
5. Library programs foster further involvement (e.g. Goldieblox girls getting introduced to local robotics team coach)

WHAT IF...

- **Instead of offering generic programs that may inadvertently read "boy" (e.g. LEGO programs), your library found ways to appeal to kids more directly through targeted marketing to the kids & parents who may be less likely to attend?**

WHAT IF...

- You started small & featured a girl on your LEGO club poster? Two girls? No boys at all!?
- Would you get new attendees?

WHAT IF...

- You reached out to leaders of STEAM programs with whom attendees may be able to continue learning (e.g. robotics coach to visit LEGO/Goldieblox club, talk about scholarships, opportunities, cement that interest and help it flourish)
- Would you foster new relationships and create bigger ripples from your initial pebble drop?

SMALL PROGRAMS, BIG IMPACTS

- **"Women's memories [of STEM programs they attended] remained constant regardless of the length of time that had passed since they had participated—that is, women's memories were equally detailed whether the program had been five years before or 15!" (McCready, Dierking, 2013)**

BENEFITS TO YOUR LIBRARY

- **Increased visibility in your community**
- **Great feel good stories from parents about direct academic impact, which can help advocate for your library's worth in times of struggle**
- **Make connections with local STEAM leaders to further lifelong learning, partnerships for future**
- **Be a STEAM leader rather than a STEAM follower**

A FINAL CAVEAT

- **Being welcoming to everyone (the public!) is important. We firmly believe in allowing and encouraging people to attend programs with which they identify.**



IN CONCLUSION, WE CHALLENGE YOU TO:

- **DO: Position your library as a STEAM leader and appeal to the kids (and their parents) who are less likely to attend those programs.**
- **DO: Grab the attention of people not already listening. Market to people less likely to notice. (Don't dog-whistle.)**
- **DO: Think of one baby step you can take this programming cycle to appeal to an underserved group in your community (girls who lack STEAM-focused programs, parents of children with disabilities, etc)**



**Hayley DeRoche: Henrico County Public Library Adult Services //
hderoche@henrico.lib.va.us**

**Linde Furman: Roanoke Public Libraries Children's Services //
lindefurman@gmail.com**

SOURCES

- **Hill, C., Corbett, C., & Rose, A. (2010). Why So Few: Women in Science, Technology, Engineering and Mathematics**
- **GoldieBlox.com (2016). About GoldieBlox. Retrieved from <http://www.goldieblox.com/pages/about>**

SOURCES CONTINUED

- **Modi, K., Schoenberg, J., & Salmond, K. (2012) Generation STEM: What Girls Say About Science, Technology, Engineering and Math: A Report from the Girl Scout Research Institute. Retrieved from http://www.girlscouts.org/content/dam/girlscouts-gsusa/forms-and-documents/about-girl-scouts/research/generation_stem_full_report.pdf**
- **McCready, D., Dierking, L. (2013) Cascading Influences: Long-Term Impacts of Informal STEM Experiences for Girls**