Leading Girls in Technology

...a transformative solution for libraries

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Macalester College
DeWitt Wallace
Library

The forces at play

- Desire to be an active participant in changing the demographics of our profession
- Drive to more deeply connect the work of the library to the college's broader mission in new and expanded ways

The catalyst

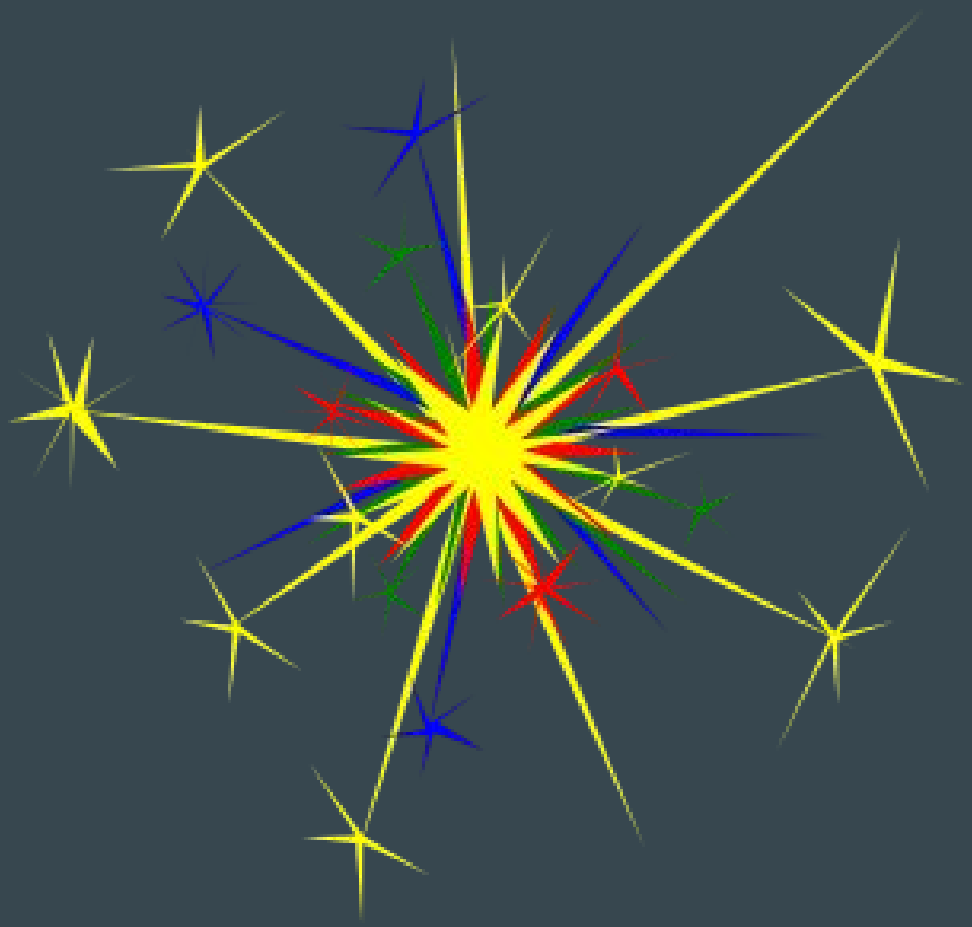
Kimberly Bryant

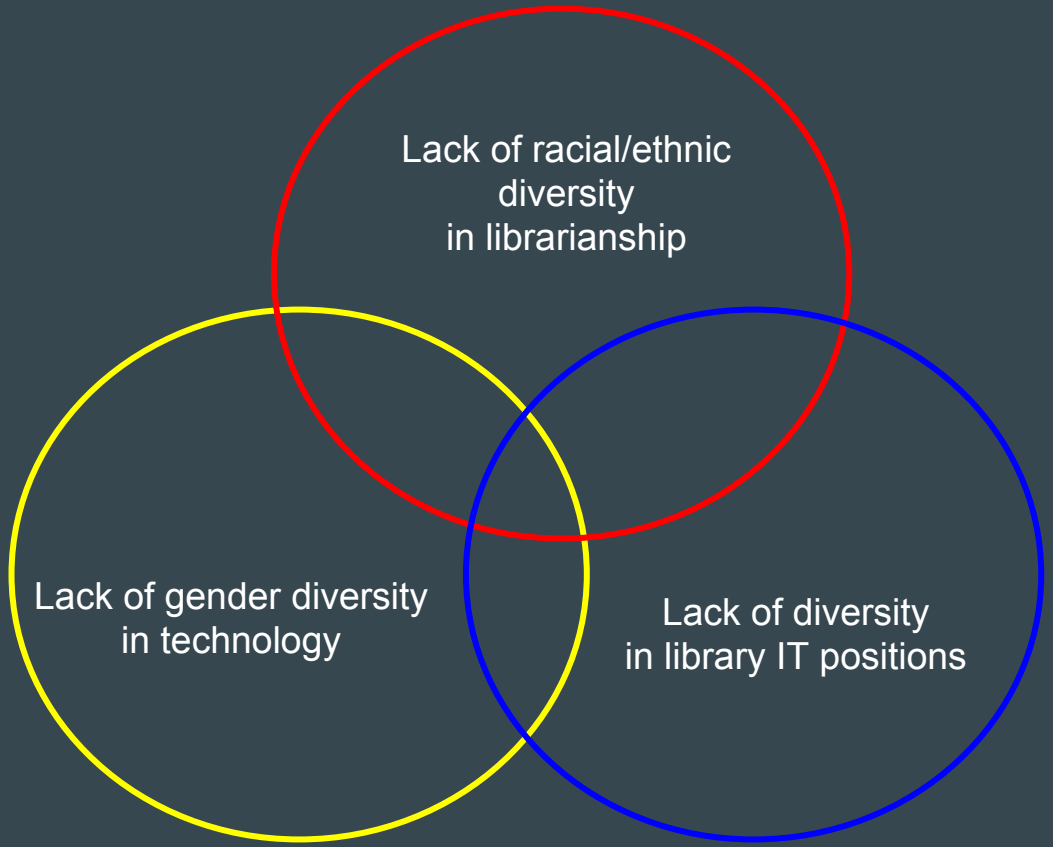
Libtech 2013

The catalyst

Kimberly Bryant, Founder Black Girls Code

Our Vision: To increase the number of women of color in the digital space by empowering girls of color ages 7 to 17 to become innovators in STEM fields, leaders in their communities, and builders of their own futures through exposure to computer science and technology.



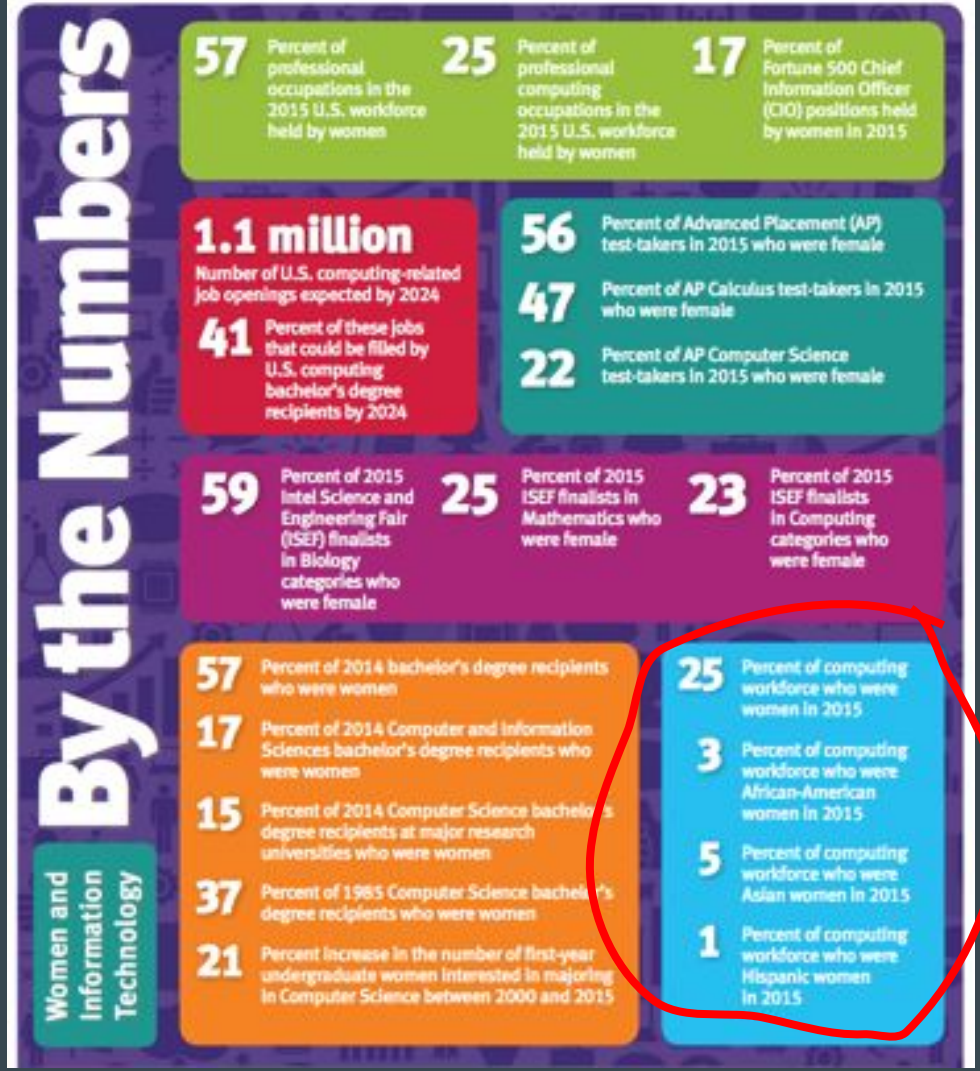


Goal:

Create technology skill-building opportunities for K-12 students from historically underrepresented populations. Provide an emphasis on librarianship as a viable professional option as a small contribution to changing the demographics of our profession.

What we know: women in computing

national center for women & INFORMATION TECHNOLOGY



https://www.ncwit.org/sites/default/files/resources/btn_04032015_web.pdf

What we know: diversity in librarianship

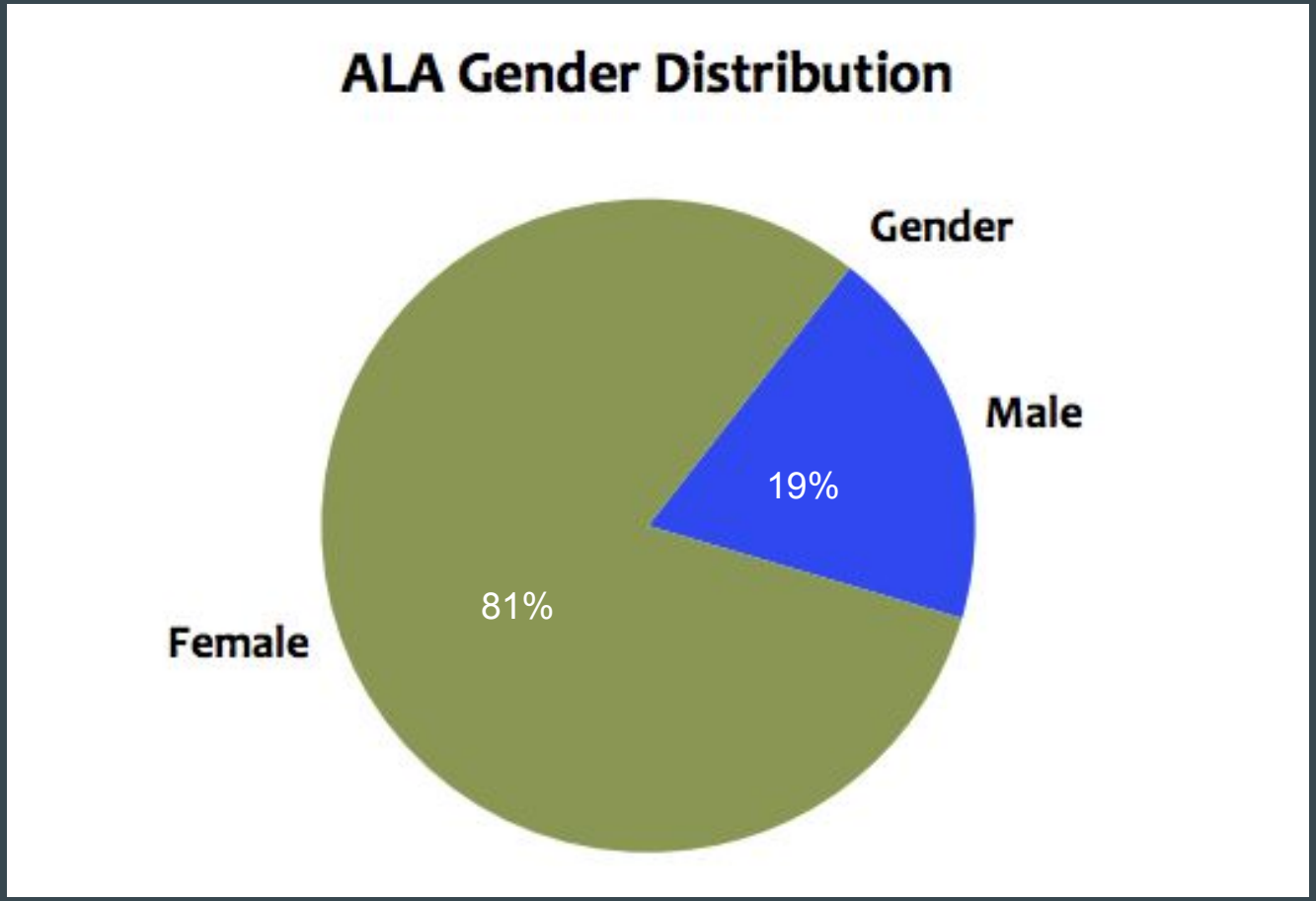
ALA Demographics Studies — September 2014

Membership remains largely unchanged since ALA began collecting these characteristics. Not dissimilar from the library profession overall, ALA members are:

- Predominantly white (87.1%). 3.9% of the membership listed their ethnicity as Hispanic or Latino. In describing their race/family origin, members selected the following responses:
  - 87.1% White
  - 4.3% Black or African American
  - 3.7% Other
  - 3.5% Asian
  - 1.1% American Indian or Alaska Native
  - 0.3% Native Hawaiian or Other Pacific Islander

http://www.ala.org/research/initiatives/membershipsurveys

What we know: diversity in librarianship



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What we know: diversity in library IT

"At present, the library has a dichotomized workforce of female librarians and male IT workers." - Lamont

Table 1. Library computer systems department heads

Year	Gender	Department Heads	Salary	Years in Field
2004–5	Women	32	76,764	18.9
	Men	60	76,060	16.9
2005–6	Women	32	78,767	19.4
	Men	52	79,680	18.4
2006–7	Women	26	81,435	18.2
	Men	52	82,409	17.6
2007–8	Women	27	87,107	18.8
	Men	51	87,136	18.8

READ THIS!!

Melissa Lamont. Gender, technology & libraries. INFORMATION TECHNOLOGY AND LIBRARIES | September 2009. Data source: Association of Research Libraries

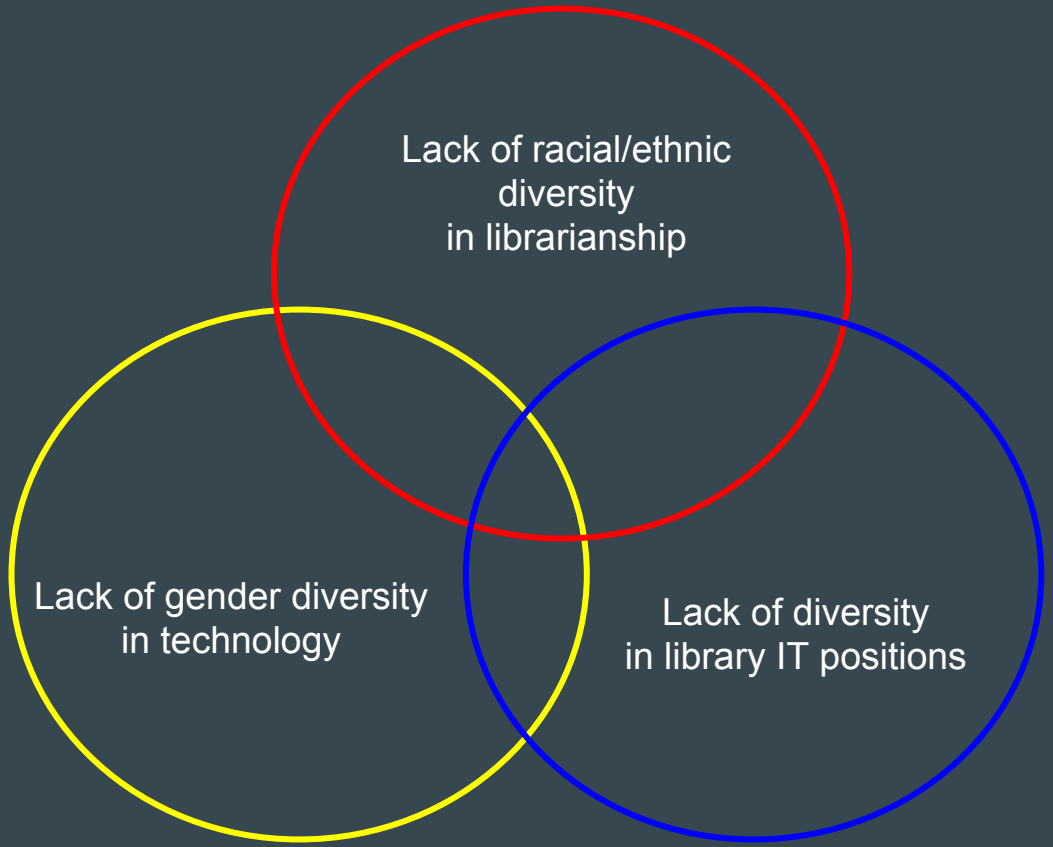
…The library profession is not immune to the gendered nature of technology just because it is a female-intensive profession.

..There is no doubt the popular image of librarians rarely includes images of librarians as technologically adept.

...More men work with technology or in tech-related areas *(in libraries)*, they earn more while in these positions, and they publish in more technology-focused journals.

Chapter 7. Hicks, Deborah. *Technology and Professional Identity of Librarians : The Making of the Cybrarian.* Hershey, PA: Information Science Reference, 2014.

READ THIS!!



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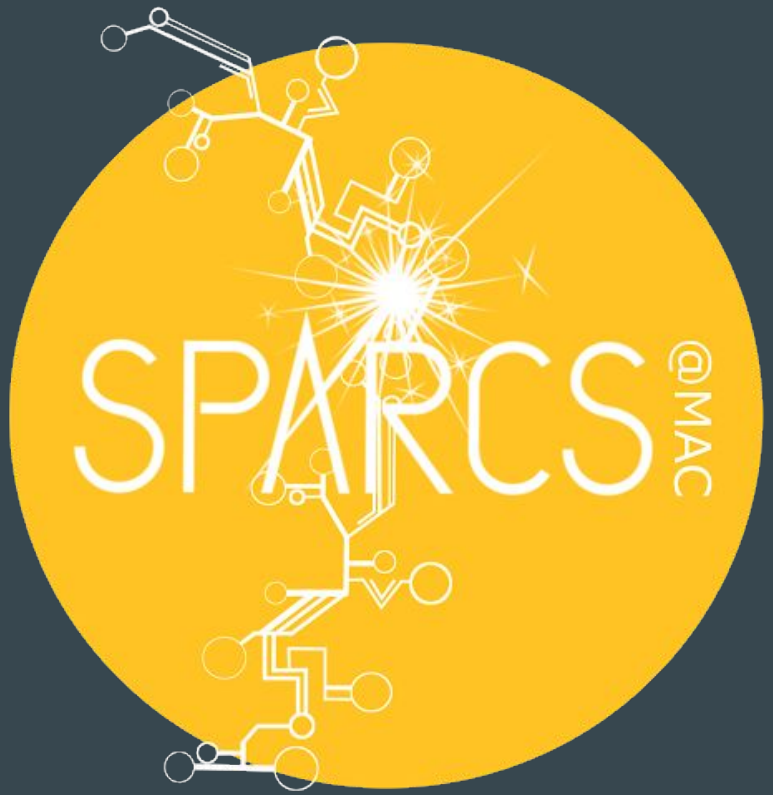
Our vision



Logo credit: Gozong Lor and AdvanceIT MN

Getting our ducks in a row

Laying the groundwork

27 months from “the spark of the idea” to fruition.

- Wrote a concept piece. Revised as I learned.
- Partnership with BGC.
- Talked to everyone and anyone who I thought would be interested or concerned.
- Got involved in the STEM movement in K-12 in my community.
- Volunteered at events like Microsoft Digigirlz, Grace Hopper, Black Girls Code.
- Sat in on AdvanceIT MN meetings.

Partnership

MACALESTER

&

Advance IT Minnesota

Enhancing career and business success

Making it happen - guiding principles

- Invite all who identify as girls and/or young women to participate.
- Have women leading as much of the program as possible.
- Historically underrepresented populations, students of color, and would-be first generation college students especially encouraged.
- Keep costs low, waive costs as needed.
- Remove unnecessary barriers.
- Make it a week-long experience.
- Build community.

What DETERS girls from computing?

- Irrelevant curriculum and reliance on lecturing instead of hands-on projects
- Teaching styles that discourage collaboration
- Lack of opportunities to take risks and make mistakes
- Limited knowledge or inaccurate perceptions about computing careers
- Lower confidence than boys, even when actual achievement levels are similar

https://www.ncwit.org/infographic/3435

Making it happen - curricular components

- Take a liberal arts approach to exploring technology & related career opportunities
- Provide self-esteem and confidence building exercises
- Offer training in skills, such as coding, game development, app development, person-centered design, etc
- Build community among young women interested in technology
- Emphasize the importance of women and diversity in the technology workforce
- Reinforce that passion + technology is the key

79 volunteers including

- High school teachers
- College faculty
- Macalester students and alumni
- Library staff
- IT staff
- Community and industry partners

26 participants from area schools

- Great River High School
- Apple Valley High School
- Duluth East High School
- Eagan High School
- Wayzata High School
- Nova Classical Academy
- Minnetonka High School
- Central High School
- Creative Arts Secondary High School
- Washington Tech Magnet School
- Fine Arts Interdisciplinary Resource (FAIR)
- MTS Minnesota Connections Academy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Working on Research?
Our librarians can help you succeed.
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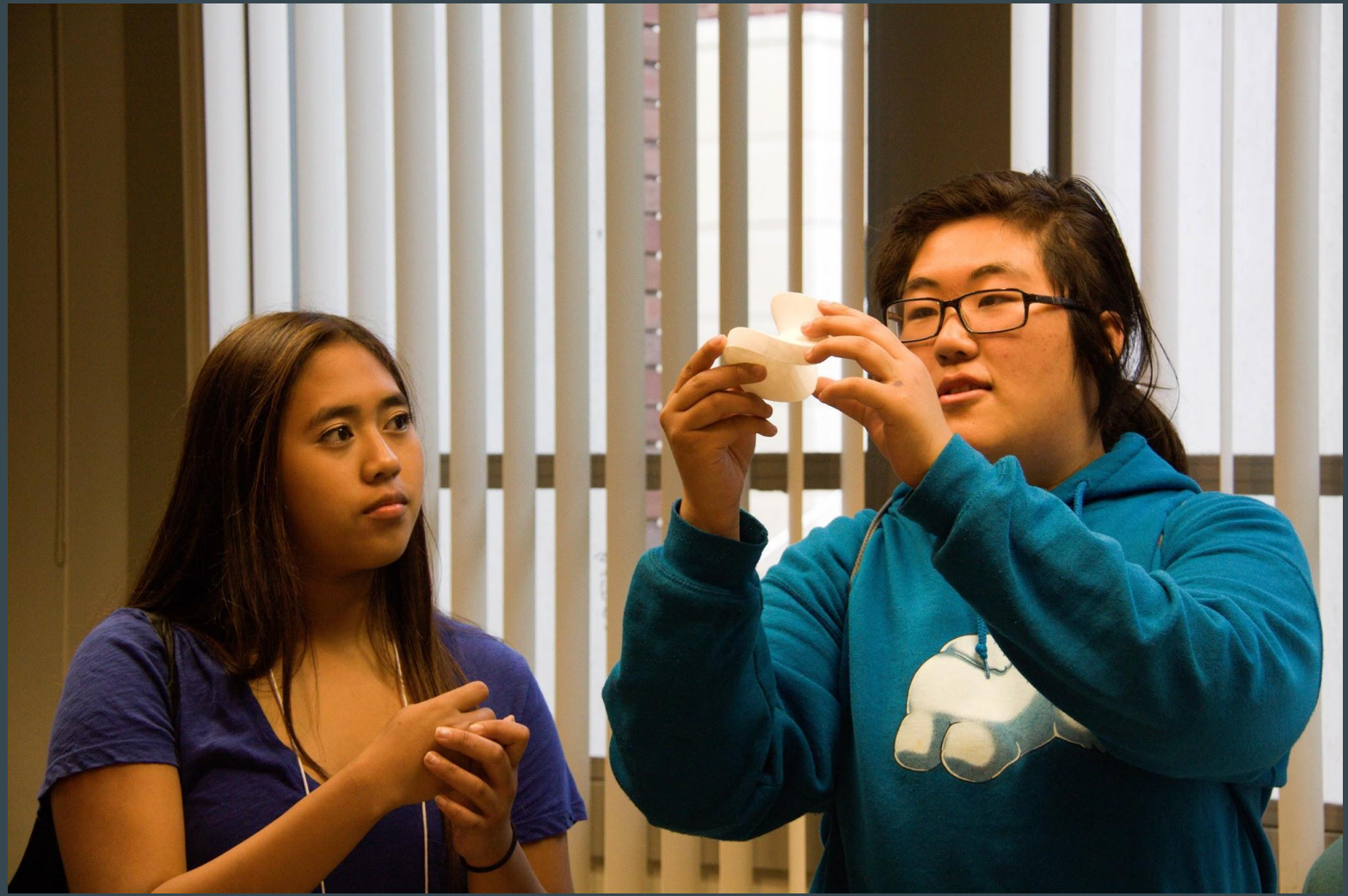


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The King and I
CinemaScope 55
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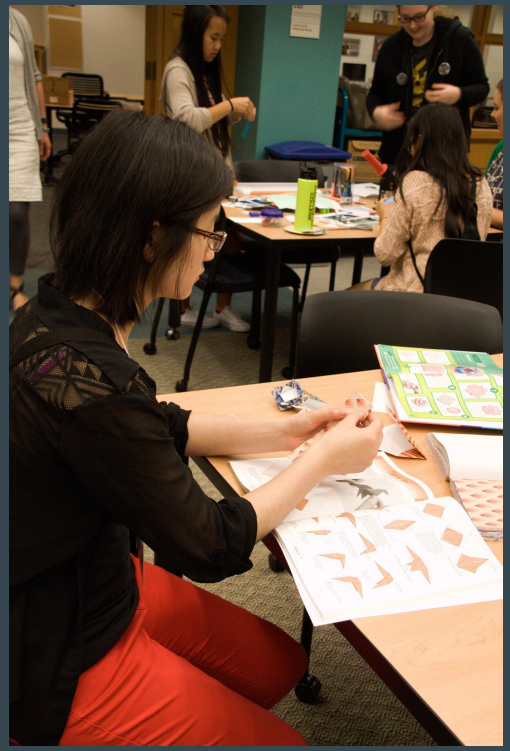
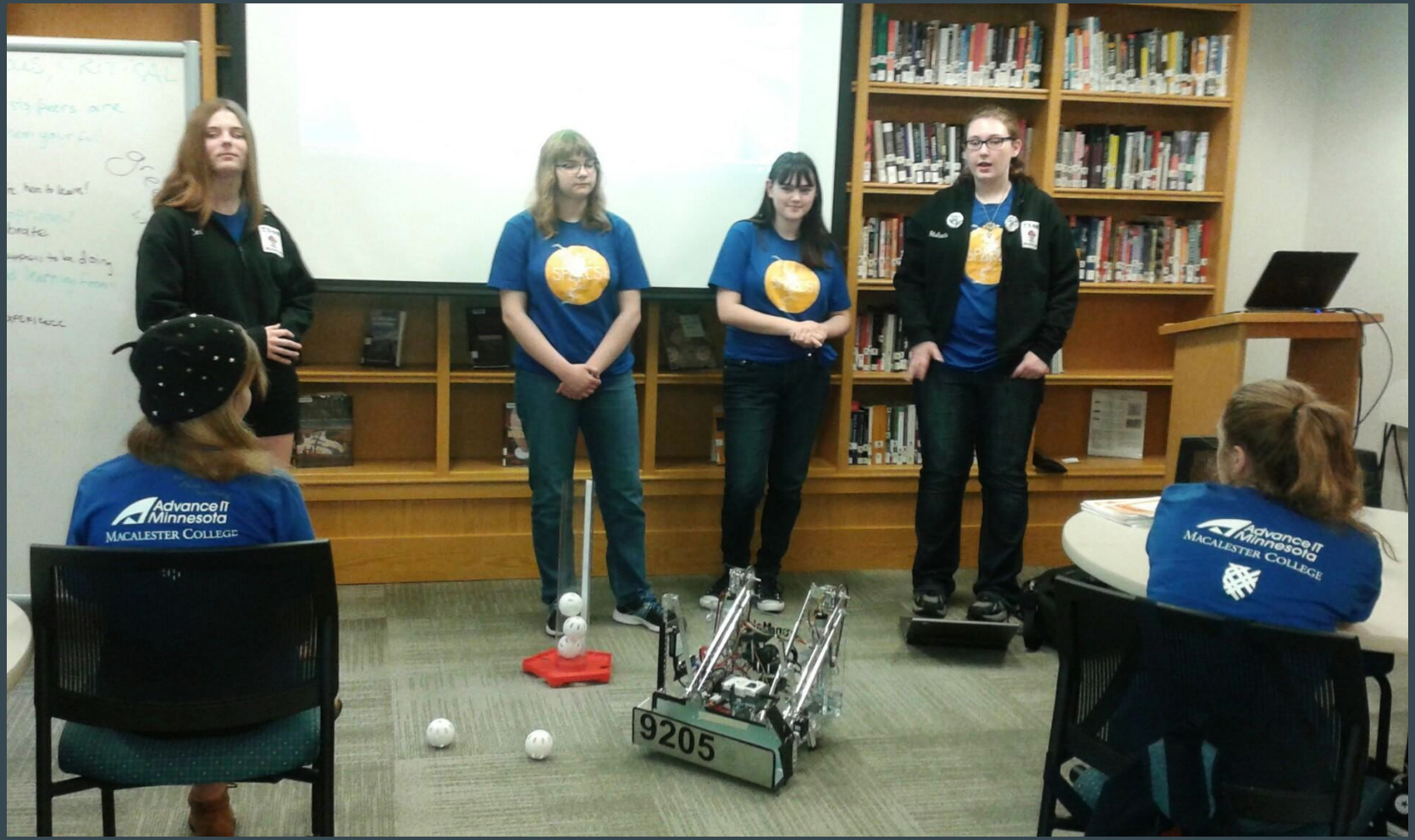
PROUD

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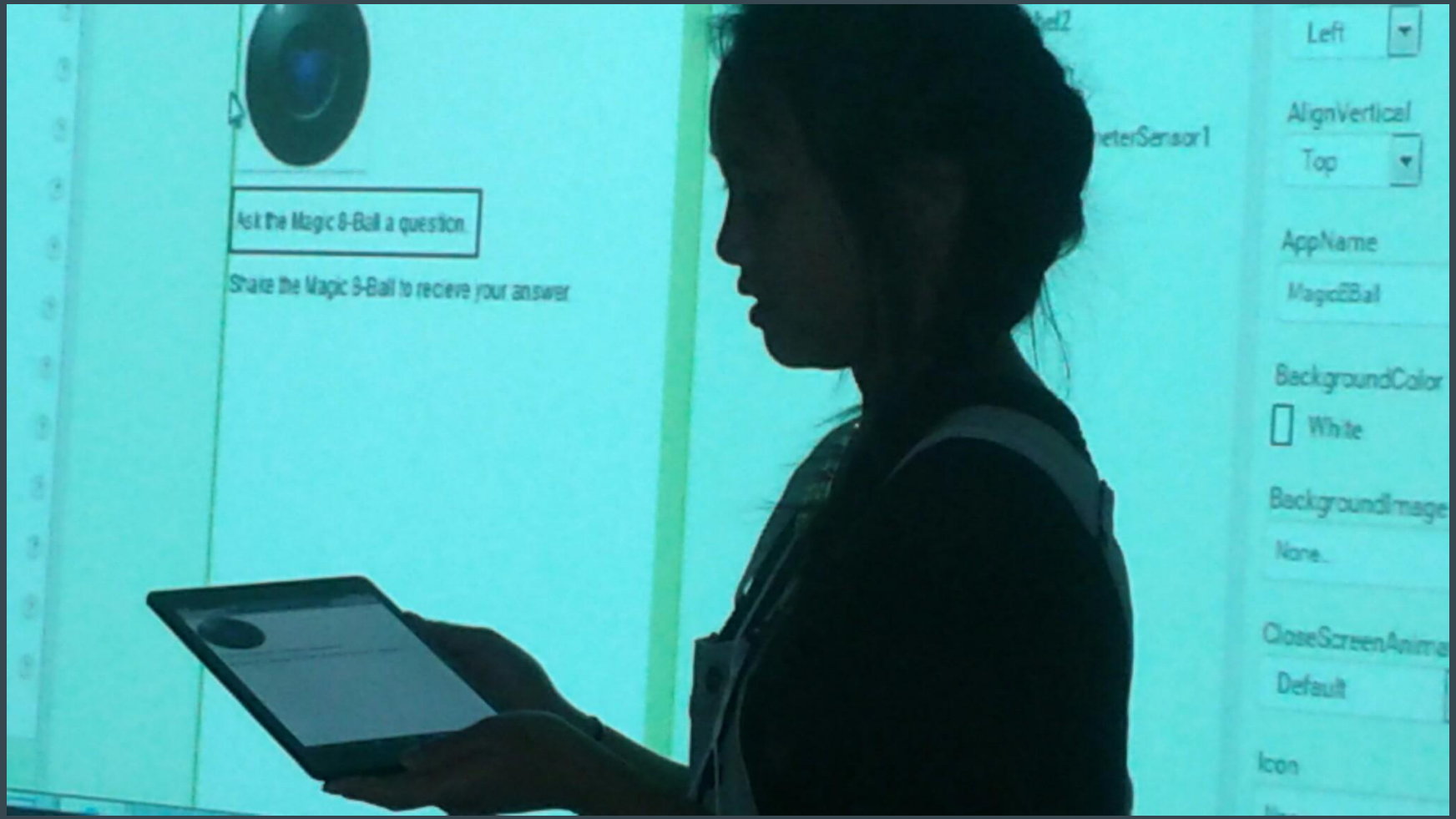
Ask the Magic 8-Ball a question.
Shake the Magic 8-Ball to receive your answer.
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SPARCS

Assessment

- 96% would recommend SPARCS@Mac to a friend.
- 92% liked that SPARCS@Mac was for young women only.
- 100% of the people who supported SPARCS@Mac 2015 want to be involved in 2016.

Assessment

- *“I learned that there are fields you can go into that combine technology with any of your other passions.”*
- *“I think that everything was important. Learning to code, program, make games, use excel, and learn how to use technology in new ways.”*
- *“The most important things I learned at SPARCS@Mac was opening up to people. I met LOTS of such great, kind, smart, funny, helpful people here, and I didn’t think I’d be as comfortable as I am. I’ve learned more how to open myself up within a week.”*

PLAY

Reflections

Cody Molho

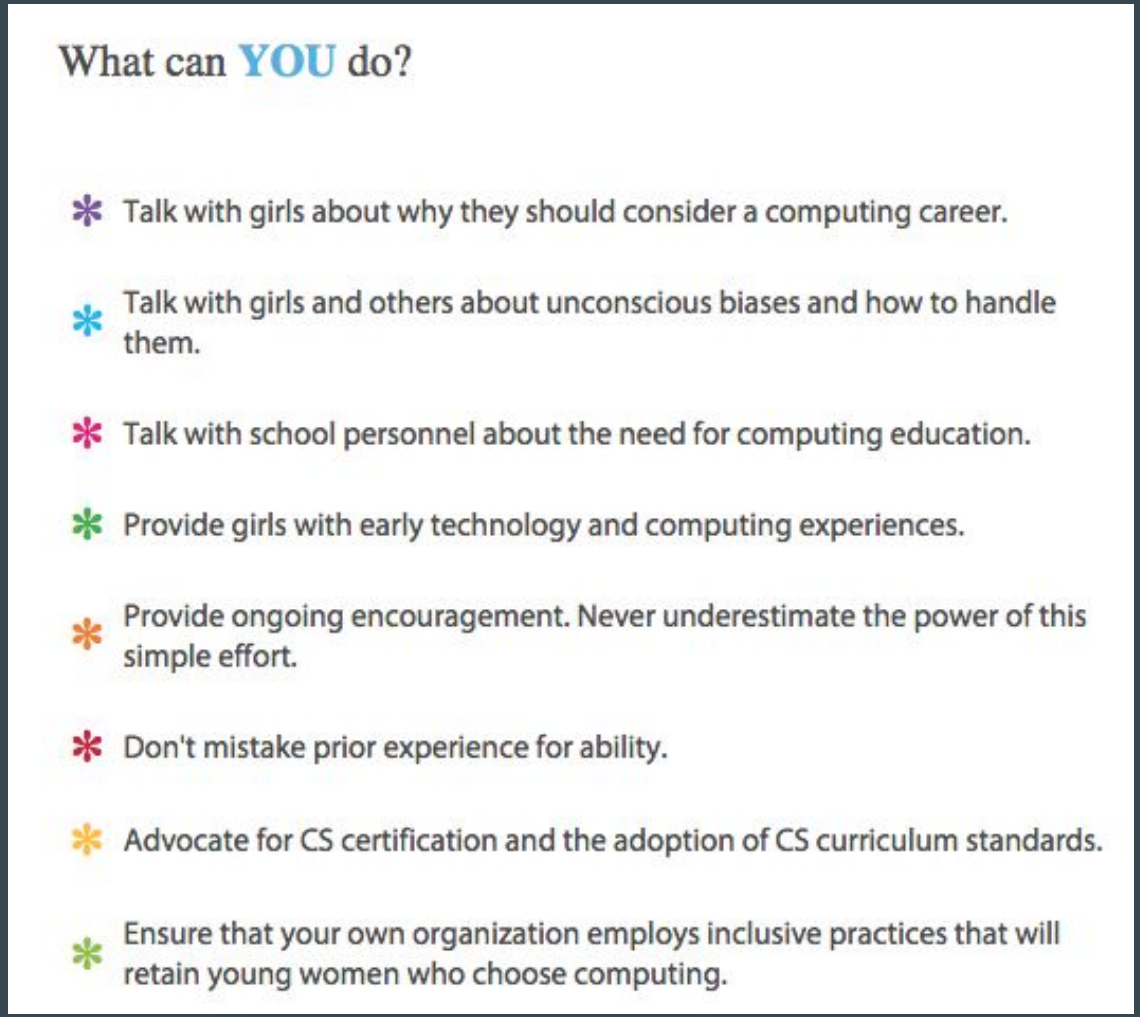
Gozong Lor

What we learned

- Supporting girls in tech is an idea that a lot of people are enthusiastic about.
- A LOT of people want to help, but need help in figuring out how.
- Connect with the folks in your community engaged in this work.
- Finding a partner might be a critical component.
- Libraries are well suited for leading this work.
- This can be a bit daunting, but worthwhile work.

Parting thoughts

And share that our profession is a rewarding one in which to apply their gifts and skills...



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SPARCS@Mac 2016

Thank you & questions

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