CoderDojo Girls - Getting girls coding!

In the CoderDojo Charter you committed to *'welcoming volunteers and children regardless of gender'.* Setting up a CoderDojo Girls session separate to your 'Open to all' Dojo, so long as it **does not disrupt your normal class schedule** is not just acceptable but encouraged. We want to close the gender gap in participation in Dojos and get Girls coding. Our aim is to one day live in a world where girls only coding clubs aren't needed because the industry is 50/50!!

Why is it a problem?

It is widely accepted that there is currently a massive disproportion of women to men choosing to follow careers in computer science.

> *"Since 1984, the number of computer science degrees awarded to women has steadily declined, and today only 13 percent of computer science graduates are female. Accordingly, top jobs in the field are male-dominated." - The NY Times*[1]

There are a number of reasons cited for why young women do not choose to explore computer programming and this issue can also be seen across all of the other STEM areas. It is usually because teenage girls feel that disciplines involving programming and hardware like computer science and electrical engineering are boring, that they won't do well in these courses, and the majors are mostly geeky people with no social lives. This is partially due to underrepresentation, and misrepresentation, of female computer science professionals in the media and popular culture, as a result of this one of the greatest reasons often cited for the lack of women in these areas is **a lack of female role models.**

At CoderDojo we want **all** young people to be able to learn to code and for it to be a fun, social and kick ass experience. We have lots of top female Ninjas in Dojos all around the world however these is still a much lesser percentage of girls in comparison to boys.

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[1]
http://articles.chicagotribune.com/2012-08-08/classified/chi-technical-difficulties-lack-of-women-in-computer-science-starts-from-an-early-age-20120808_1_technology-careers-computer-young-women

Top Tips

Have female role models in your Dojo!

While it can be challenging to find a multitude of technical female mentors it is advised to encourage them as much as possible. This will not only allow young women to feel more comfortable coming to the Dojo but will give them a clear view of their possible careers paths and give them real role models to look up to.

Youth mentoring is highly encouraged at CoderDojo and it is advised that if your female Dojo Ninjas graduate to mentoring their peers then get them on the beginners/Scratch table as soon as possible. If young girls come to a Dojo and see their peers in positions of respect they will feel inspired to stay and keep working.

Don't make it intimidating!

A lot of young women are intimidated by the idea of computer programming and that they are not intelligent enough to succeed at it or that it is just for boys. Keep it simple, keep it visual, break the content into easily understandable pieces and encourage them to speak up if they have any questions. Young women need to be encouraged to try it and to be supported while doing so.

Make it fun!

Don't be too serious about it. Focus on project based activities that yield an end result, don't get bogged down in the details and on making sure the participants having a enjoyable experience learning to code. Let them see that coding is actually an incredibly creative activity, and that it can be fun and rewarding!

Make it relevant!

When working with young women try and make the content they are working on relevant to their interests. Without meaning to generalise having gender neutral themed projects will be more successful for young women. Try working with more artistic projects, narrative based projects, role playing games, musical projects etc. rather than focusing on sports games or fighting games (even if the boys in your Dojo push for this!). Try working on projects in your Dojo that are loose and free to be adapted by individuals in their own unique ways.

What is CoderDojo Girls?

CoderDojo aims to create spaces that make girls feel comfortable and excited about computer science. Some Dojos have gone one step further and have separate sessions just for girls, CoderDojo Girls!

Case Study, CoderDojoGirls DCU:

"DCU has launched CoderDojoGirls, a new computer coding club catering for the specific interests and motivations of girls. The new dojo aims to help build up their confidence and interest in the areas of science, technology, engineering and mathematics.

"It's so important to get girls exposed to technology at a young age. When a girl comes to a CoderDojo, not only does she learn how to program, she learns how to analyse, dissect, research and resolve problems," says Niambh Scullion, DCU and IBM CoderDojo mentor.

Activities will be focused on projects such as creating a pop band fan page, building pianos or just having fun with social media, all under the guidance of female mentors.

> *"We encourage participants to suggest initiatives for this Dojo and aim to align materials to their interests. To get us started, two amazing projects have been proposed. A piano game that teaches you how to play your favourite pop song – through this rocking and fun game there is so much great learning from a cool webpage to a HTML5 game. After this we are going social with a social network game which you can share with all your friends," - DCU CoderDojo mentor, Noel King."[2]*

More CoderDojo Girls Advice and Resources

Advice from Rebecca Garcia, CoderDojo NYC Champion and founder and advocate for girls in code:

- Recruit more women & girl mentors (very hard to do, we need more in NYC)
- Create curriculum/activities that are project based, especially ones that focus on stories
- Visual projects such as Scratch are effective

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[2] http://www.digitaltimes.ie/dcu-launches-coderdojogirls-just-for-girls/

- Create partnerships or reach out to women/girls organizations i.e. Robogals is in Australia

CoderDojo Girls Google Group

If you would like to ask any specific questions on getting girls coding or join in the conversation with other Dojo organisers interested in this topic please join the CoderDojo Girls Google group which you can find here: https://groups.google.com/forum/#!forum/coderdojogirls
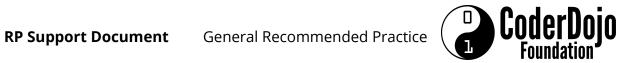
Groups and Organisations Supporting Girls Coding

Girls Who Code: http://girlswhocode.com/
Black Girls Code: http://www.blackgirlscode.com/
Girls Teaching Girls to Code: http://www.girlsteachinggirlstocode.org/
CodeFirst: Girls http://www.codefirstgirls.org.uk/

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