



Your Guide on how to  
**Get Girls  
Coding!**

# Why is it important?

## THE NUMBERS BEHIND WOMEN IN TECH

Less than

**7%**

of tech positions in Europe  
are filled by women.



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

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 disciplines.

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 those who study ICT 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 positive female role models in the industry.

Possible reasons include:



Hostile macho culture



Isolation



Lack of effective sponsors

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# 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!

While in an ideal world we would like sessions to be gender neutral and welcoming for all, some times it is necessary to have a special session focused on girls specifically to give young women an introduction.

The goal of all CoderDojo girls groups is to encourage young women to engage with and experience technology with the hope that they would then cross over and join the normal CoderDojo session.

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.

This global imbalance in the technology and STEM sector needs to be addressed. Our ultimate goal is for Dojos to achieve gender parity, for them to be places where all young people come to learn how to code and be creative in a fun and social environment.



**At the moment approximately 30% of attendees at Dojos are girls but this figure varies from club to club. This seems like a low figure but it is actually above the industry average.**

# Top Tips for Encouraging Girls



## 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.

## Make it welcoming!

A lot of young women are intimidated by the idea of computer programming and think 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 make 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.

**Project Tips:**  
Work on gender neutral themed projects, artistic, visual and narrative based projects, role playing games, musical projects etc.





# Case Study



## CoderDojoGirls DCU (Dublin City University)

“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 are 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 favorite pop song – through this rocking and fun game there is so much great learning from a cool web page 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.

[Watch video, CoderDojoGirls DCU.>](#)



James Whelton (CoderDojo Founder) at CoderDojo Girls in DCU



# More CoderDojo Girls Advice and Resources

## Advice from Rebecca Garcia (CoderDojo NYC Champion)

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

## CoderDojo Girls Forum

If you are involved in the CoderDojo community and 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 Forum on Zen, the community platform. You can login or register for Zen [here>.](#)

There is also the CoderDojo Girls Google group which you can find [here>.](#)

## Groups and Organizations 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/>

### Code First Girls

<http://www.codefirstgirls.org.uk/>





# Thanks to our contributors:

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If you have any questions about this guide please feel free to let us know at [info@coderdojo.com](mailto:info@coderdojo.com).

