

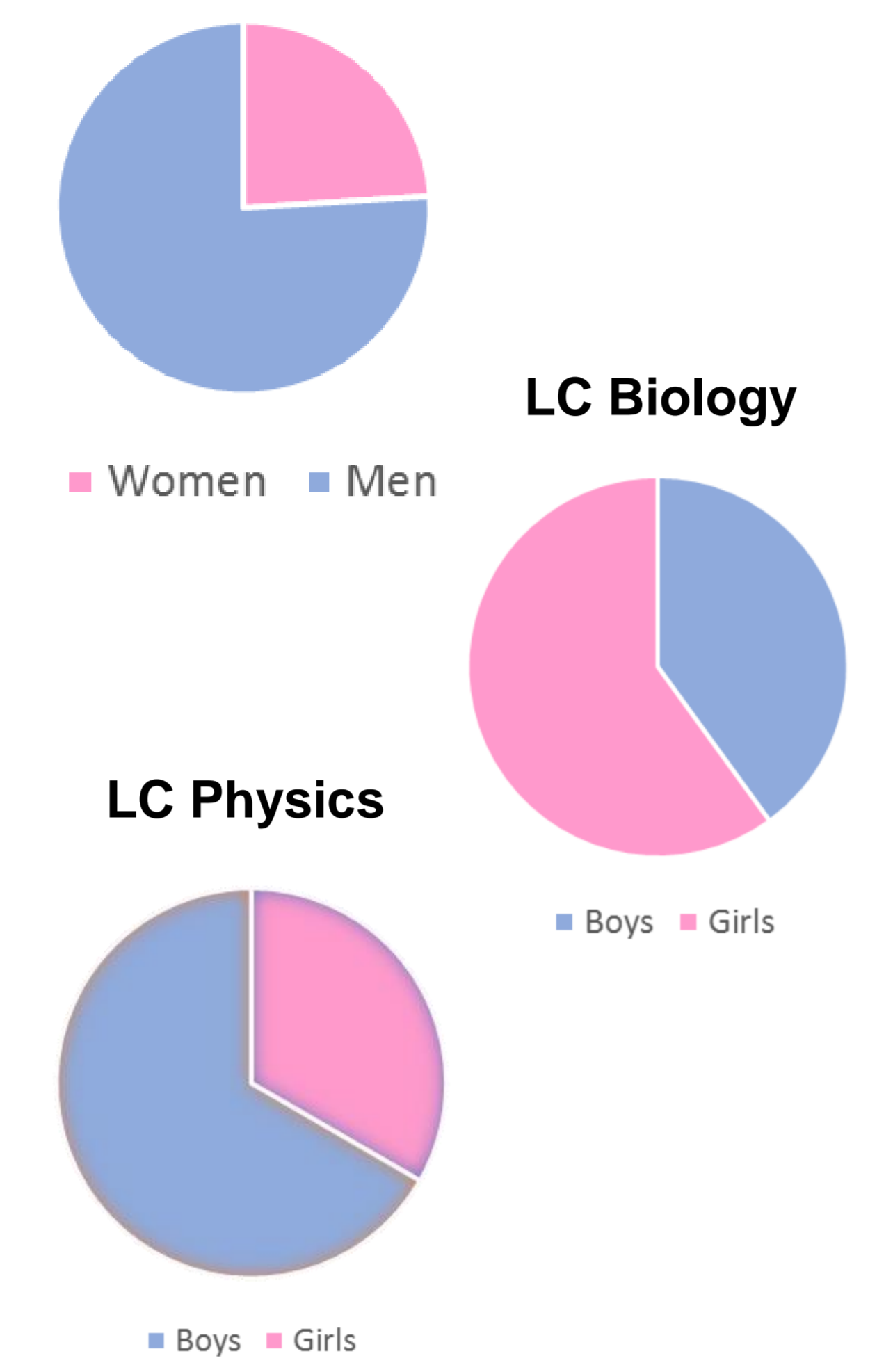
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## Background

Despite the advancements made by women in the employment sector and the academic success enjoyed by girls<sup>1</sup>, women continue to be persistently underrepresented in the fields of science, technology, engineering, and maths (STEM). In Ireland, **women represent fewer than 25% of people working in jobs that use STEM skills<sup>2</sup>.**

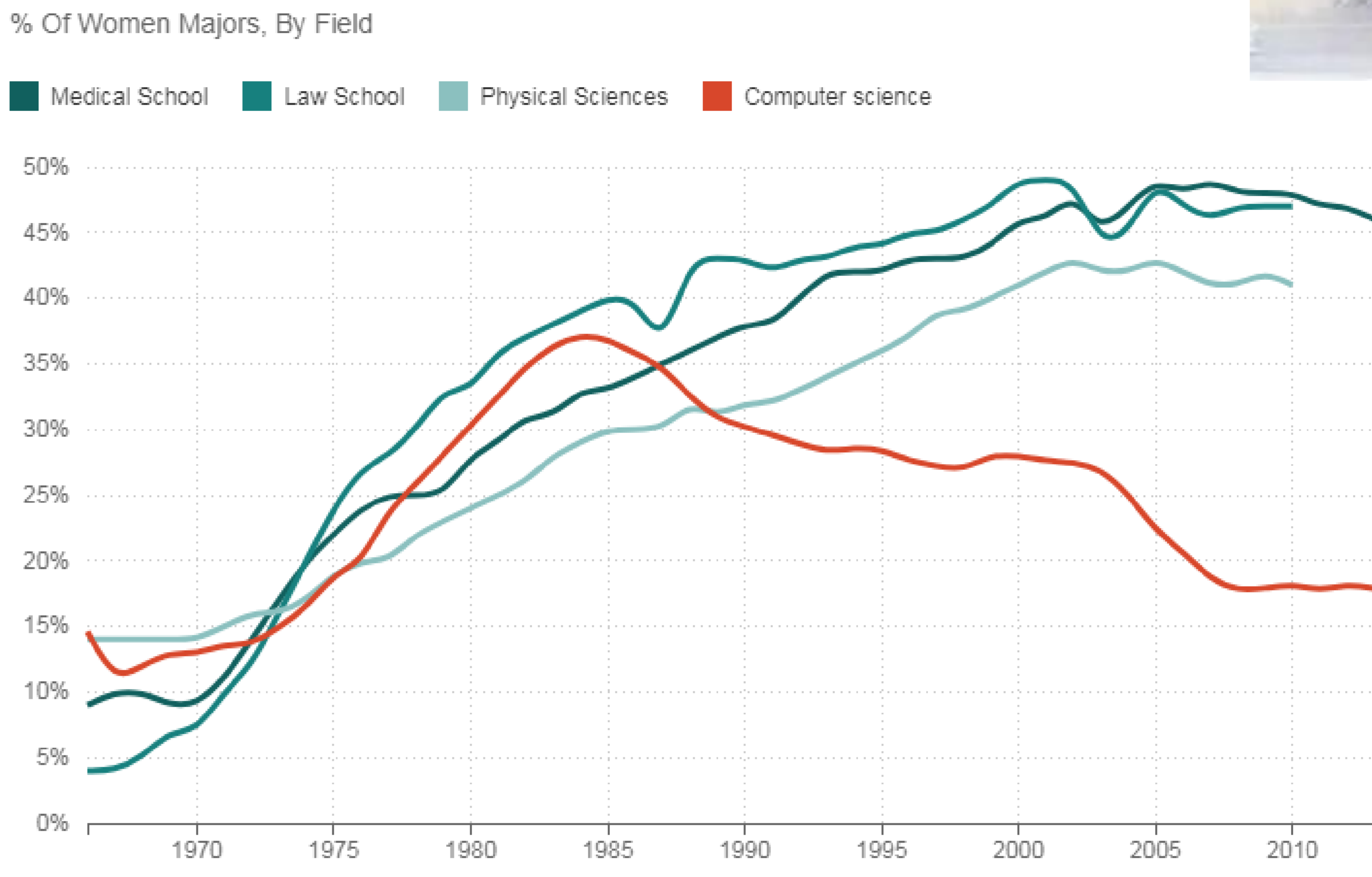
Research on gender and STEM tells us that in order for young women to pursue a career in STEM, **they must believe in the importance of STEM and believe in their ability to succeed in the field<sup>3</sup>.** Research conducted by Microsoft has revealed that most girls become interested in STEM at age 11, but their interest starts to wane by age 15.

## Working in STEM in Ireland



## What happened to women in Computers?

What do you notice about the numbers of women studying computer science? Why do you think this is?



## Joining our project

If you would like to learn more about our project or have your school participate, we would love to hear from you.

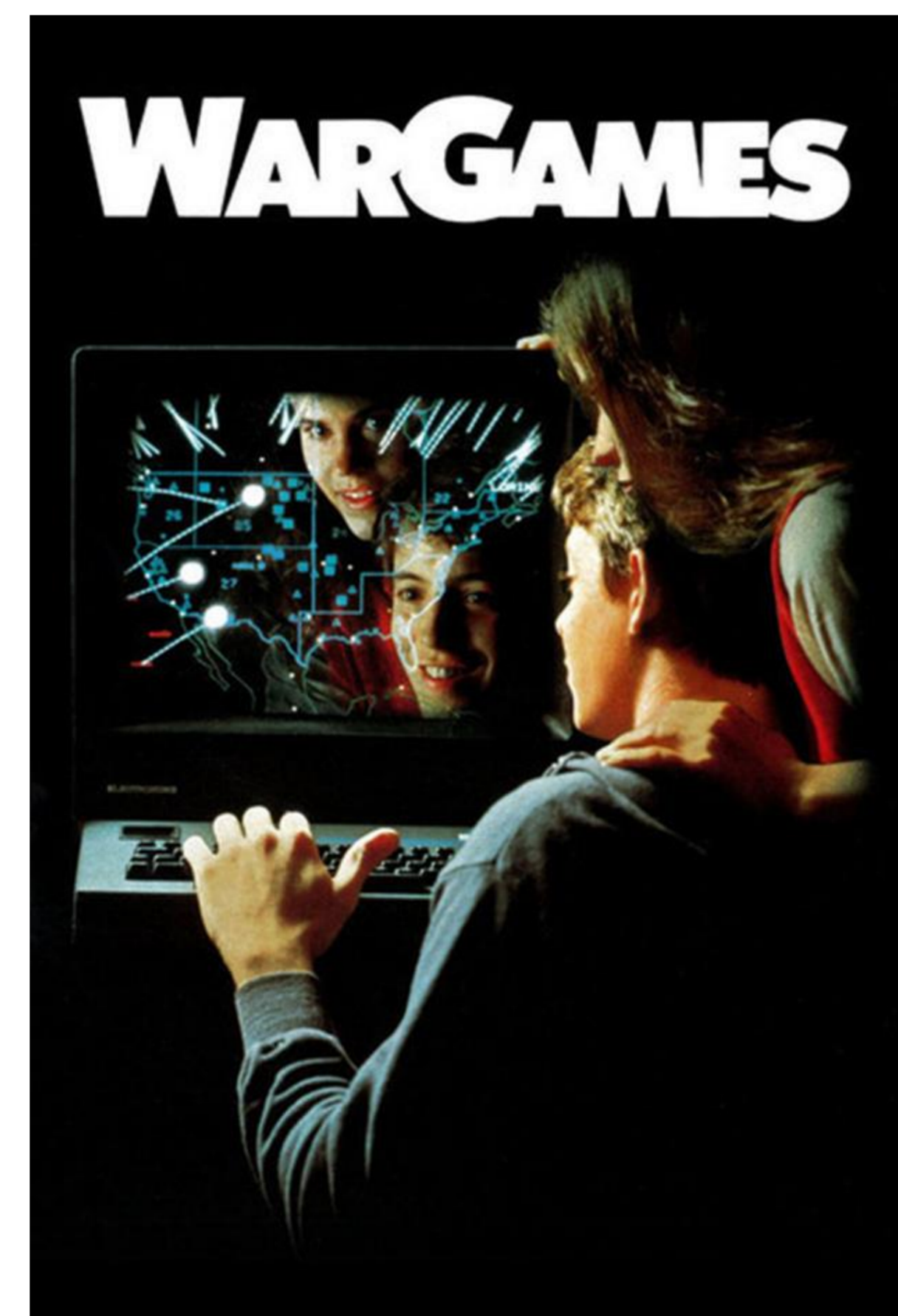
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Contact us: [karen.maye@ucd.ie](mailto:karen.maye@ucd.ie)



## Stereotype Threat and Implicit Bias

An **implicit bias** is an **unconscious** association, belief, or attitude toward any social group.

Due to implicit biases, people may often attribute certain qualities or characteristics to all members of a particular group, a phenomenon known as **stereotyping**.



Such biases do not necessarily align with our own sense of self and personal identity.

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## Innovative Pedagogy

Our project aims to infuse science with the **arts and humanities**, utilising **Philosophy for Children (P4C)** and **Storytelling** to develop a growth mindset and critical thinking.



Research emphasises the importance of instilling self-belief and confidence in girls to engage in STEM. Through hands-on activities like First Lego League/Micro:bit - Do Your Bit and AR/VR/XR immersive activities we will engage girls in coding, robotics, and virtual reality experiences that will foster curiosity and cultivate enquiry.

## Funding and partners



**References**

<sup>1</sup> OECD (2012). Equity and Quality in Education: Supporting Disadvantaged Students and Schools - Spotlight Report: Ireland, OECD

<sup>2</sup> STEM Education Review Group, (2016). A Report on Science, Technology, Engineering and Mathematics (STEM) Education.

<sup>3</sup> Accenture (2014). Powering economic growth: Attracting more young women into science and technology.

<sup>4</sup> Weir, S., Kavanagh, L., & St. Patrick's College (Dublin, Ireland). Educational Research Centre. (2018). *The evaluation of DEIS at post-primary level: Closing the achievement and attainment gaps.* Dublin: Educational Research Centre