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Type: **Talk**

Contributed talk: Every Chemist a Programmer

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Computing as a discipline suffers from a significant gender imbalance, with the imbalance in computer programming being particularly pronounced. I review the evolution of the way I have taught programming, from early courses which reinforced these biases, to my latest python programming course which is delivered in the first year of an undergraduate chemistry degree. In an already heavy teaching timetable we were only able to allocate 6 hours of contact time to the course. The course ran for the first time during the lockdown of spring 2021, which gave us freedom to experiment with online delivery. The resulting material was delivered as 12 short video lectures totalling 90 minutes, linked to exercises with online feedback.

The course incorporates EDI material on gender bias both implicitly in the course design and explicitly in the lecture materials. While there was no control group, student feedback on the course as a whole and on the EDI material in particular has been positive and one student explicitly reported a change in attitude arising from the EDI material.

I will discuss briefly how the inclusion goals of the course may have been enabled by my own experience as a genderqueer autistic scientist.

Region

UK/Ireland

Key words

computer programming, teaching, gender, inequality

Primary author: COWTAN, Kevin (University of York)

Presenter: COWTAN, Kevin (University of York)

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