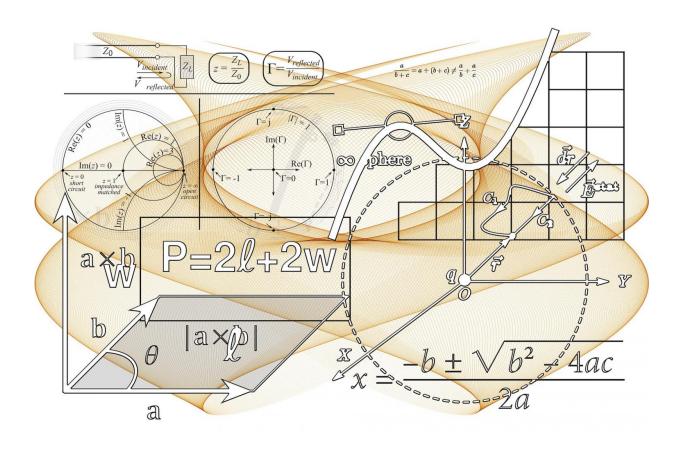


## Schools need to encourage broader participation in science learning outside of the classroom

August 22 2017



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Schools are failing to offer sufficient opportunities for students from



diverse backgrounds to engage in science-based learning outside of the classroom, and should be doing more to open up participation, according to new research published in the *International Journal of Science Education*.

Analyzing survey data from almost 6,000 UK secondary schoolchildren (aged 11-16) from communities with traditionally low science engagement, the authors investigated who participates in science learning outside of the classroom.

They discovered that students from less privileged backgrounds remain far less likely to participate in informal science learning experiences, such as <u>school</u> trips and museum visits. Over half of the surveyed students had never been on a science-related school trip, while nearly 70% had never had a visitor talk on science.

A focus on targeting higher attaining students, the high cost of providing school trips and the pressures of high-stakes testing were suggested obstacles restricting wider participation, contributing to inequality in STEM-based learning outside of the classroom.

Despite these obstacles, there were strong levels of interest in science among students, suggesting that school-led efforts to broaden engagement would be well received. The authors therefore argued that schools can play a leading role in encouraging interest in science among traditionally marginalized groups.

"We would encourage schools to ensure that science-related extra curricula activities, including school visits, are targeted to reach all students, not just those in the 'top' sets, to avoid reproducing existing inequalities", comments co-author Dr Jennifer DeWitt. "We would also urge places like science museums and science centres to broaden their offer, so that a wider range of individuals - not just those from



privileged backgrounds - can feel welcomed and comfortable there."

Against the backdrop of widespread drives to increase and broaden science engagement among young people, the findings are especially significant. The authors urge for further investigation to fully understand the broader patterns of involvement shown by their study.

**More information:** Jennifer DeWitt et al, Participation in informal science learning experiences: the rich get richer?, *International Journal of Science Education, Part B* (2017). DOI: 10.1080/21548455.2017.1360531

## Provided by Taylor & Francis

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