

Trust in the third space of science education

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Science has a history of contribution to society. Medical and technological advances have changed the way we live. That science is valued can be seen by its prominence in education systems across the world. Through these formal education systems, we trust that students are being educated about science, its methods and benefits. Formal education systems however are not the only space in which individuals and society seek out science understanding. While the science education literature has long written about informal science education this talk takes up a third space, the casual space which is decentralised and contains many possible explanations about the world. The casual space is agentive and driven by self-motivation and is increasingly important to society and the space where people most often turn to seek out information about science. However trust in this space is different to that in formal and informal science education due to the vast range of information, truths and norms available.

In this talk we investigate issues of trust in science and education for young people across formal, informal and casual science education. We explore trust in science and education with respect to the different modes of knowledge and rationality that are at play in the formal, informal and casual spaces wherein science is accessed. Through a consideration of the modes of rationality that are emphasised in these three different science education spaces we have investigated the role of judgement as a means of assessing truths. In doing so we raise issues of the nature and structure of these spaces and how each foregrounds particular forms of rationality and consider possible implications for how formal education can respond to and better equip students to make rational judgements about science.