

Before science: Developing epistemic perspectives

When confronted with new topics and areas of knowledge, what basic understandings about the nature of knowledge and knowing do people bring to bear in order to try to make sense of the information and topic at hand? Unlike philosophers, or presumably scientists, lay people do not live in their epistemic approaches to knowledge and the world—at least they do not so consciously, and they likely do not have fully worked out, systemic epistemic principles. But in everyday reasoning, people’s epistemic “theories-in-action” come to the fore when faced with the task of evaluating or constructing knowledge claims. These tasks have become particularly salient in the time of COVID, and given this it has become more apparent that researchers’ considerations of people’s everyday epistemic perspectives have important implications for the public understanding of science and science education. The objective of this seminar is to present one theoretical view which defines different types of lay epistemic perspectives distinguished by understandings of the sources of knowledge, the role of subjective perspective and processes in knowing, the standards or knowledge justification, and judgments of certainty. In addition, the research will be presented to illustrate methods of assessing these perspectives with particular attention to science, and discuss how academic discipline and culture might play roles in advancing different pathways in epistemic development,