Understanding Explanation And Scientific Knowledge

#scientific knowledge #understanding science #science explanation #knowledge acquisition #epistemology

Exploring the dynamics of understanding explanation and scientific knowledge is fundamental for intellectual growth and informed decision-making. This domain delves into the processes by which scientific principles are elucidated, fostering a deeper grasp of complex concepts. It encompasses strategies for effectively communicating scientific knowledge and developing a robust understanding of science, critical for both academic pursuits and everyday knowledge acquisition and effective science explanation.

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In this sense, arguments aim to contribute knowledge, whereas explanations aim to contribute understanding.[citation needed] While arguments attempt to... 9 KB (1,177 words) - 04:41, 24 November 2023
The scientific method is an empirical method for acquiring knowledge that has characterized the development of science since at least the 17th century... 136 KB (15,633 words) - 21:12, 12 March 2024
scientific theory is an explanation of an aspect of the natural world and universe that can be (or a fortiori, that has been) repeatedly tested and corroborated... 54 KB (6,865 words) - 08:31, 14 March 2024
Understanding and knowledge are both words without unified definitions. Ludwig Wittgenstein looked past a definition of knowledge or understanding and... 11 KB (1,229 words) - 12:09, 5 January 2024
study the natural world and propose explanations based on the evidence derived from their work." The classical model of scientific inquiry derives from Aristotle... 25 KB (3,259 words) - 19:26, 8 March 2024
scientific knowledge (SSK) is the study of science as a social activity, especially dealing with "the social conditions and effects of science, and with... 17 KB (1,828 words) - 16:00, 28 December 2023
science, and eminent natural philosophers and scientists have argued for the primacy of one or another approach to establishing scientific knowledge. Rationalist... 101 KB (13,163 words) - 14:44, 1 March 2024
minimal number of parts. Methodological reductionism: the scientific attempt to provide an explanation in terms of ever-smaller entities. Theory reductionism:... 29 KB (3,188 words) - 03:32, 11 March 2024
rigorous, systematic endeavor that builds and organizes knowledge in the form of testable explanations and predictions about the world. Modern science... 164 KB (15,646 words) - 12:56, 17 March 2024
"theory" refers to scientific theories, a well-confirmed type of explanation of nature, made in a way consistent with the scientific method, and fulfilling the... 38 KB (4,335 words) - 00:10, 17 March 2024
understanding. The progress of scientific knowledge is traditionally seen as a gradual and continuous process in which the existing body of knowledge... 191 KB (18,579 words) - 09:02, 15 March 2024

sciences and the humanities: the study of human behavior in its social and cultural aspects. Scientific knowledge must be based on observable phenomena and must... 39 KB (3,856 words) - 13:42, 10 March 2024
social structure for the explanation of Mode 2 as an historically emerging structure for the production of scientific knowledge, and its relation to Mode... 21 KB (2,654 words) - 23:24, 3 January 2024
rely and use theories and formulas from other scientific disciplines, such as chemistry and physics, the pursuit of understanding how knowledge can be... 96 KB (11,941 words) - 18:03, 11 March 2024
derived from the ancient Greek epist m , meaning "knowledge, understanding, skill, scientific knowledge", and the English suffix -ology, meaning "the study... 133 KB (13,759 words) - 21:36, 12 March 2024
Declarative knowledge is an awareness or understanding of facts. It can be expressed through spoken and written language using declarative sentences and can thus... 112 KB (11,287 words) - 06:32, 11 March 2024
: hypotheses) is a proposed explanation for a phenomenon. For a hypothesis to be a scientific hypothesis, the scientific method requires that one can... 20 KB (2,579 words) - 01:22, 4 February 2024
styles and the sometimes distancing nature of true scientific texts. Because students' prior knowledge and misconceptions are important factors for learning... 18 KB (1,995 words) - 21:06, 9 December 2023
concept that emerged in the 19th century and revolves around the idea that gaps in scientific understanding are regarded as indications of the existence... 17 KB (2,304 words) - 19:15, 1 March 2024
Scientific literacy or science literacy encompasses written, numerical, and digital literacy as they pertain to understanding science, its methodology... 31 KB (3,348 words) - 20:01, 13 March 2024