Learning theory and classical research in STEM

Ed769

This course delves into the intricate relationship between learning theories and classical research within the realm of STEM (Science, Technology, Engineering, and Mathematics). We will explore how renowned learning theories, such as behaviorism, cognitivism, and constructivism, influence the design and implementation of effective STEM education.

Through a critical examination of seminal research studies, we will unravel the underlying principles and methodologies that have shaped our understanding of STEM learning. You will gain insights into the cognitive processes involved in problem-solving, critical thinking, and creativity in STEM contexts.

By understanding the theoretical foundations and empirical evidence, participants will be equipped to critically evaluate existing STEM educational practices and develop innovative approaches to enhance student learning outcomes. This course aims to foster a deep appreciation for the interplay between theory and practice, empowering you to become effective educators and researchers in the field of STEM education.