

SCIENTIFIC DIALOGUE IV

Psychology of Learning in Higher Education: Trends and Challenges in Interdisciplinary Approaches

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The term learning is a keyword in the discipline of education. The discipline of Education has a history from 20th century. It has been believed traditionally that the only way to properly impart education is through the standard classroom method.

A student is primarily a person enrolled in an educational institution who attends classes in a course to attain the appropriate level of mastery of a subject under the guidance of an instructor and to do whatever activities the instructor assigns. A learner is “a person who is finding out about a subject or how to do something.” Learners can learn without teachers, but students are only students when they have teachers.

From the point of view of neurobiology, learning involves changing the brain. For optimal learning to occur, the brain needs conditions under which it is able to change in response to stimuli (neuroplasticity) and able to produce new neurons (neurogenesis). The most effective learning involves recruiting multiple regions of the brain for the learning task. Many brain imaging technologies are now sensitive to changes in brain circuits that accrue from learning, allowing researchers to better understand how specific learning experiences drive changes in brain function and structure.

Online teaching was not a priority before the pandemic. Teachers did not possess the necessary pedagogical and technical skills to integrate

digital technology into education when a compelling need arose. Lack of continuous updates of ICT knowledge and skills led to techno-anxiety widely reported in research. More attention is directed learning toward blended learning environments. The justification for blended learning comes from the arguments that traditional classroom teaching methods are no longer effective to achieve current learning standards.

The disparities in knowledge and ability to use digital and information technology, experience, and competencies are wide. Partnership with technologists would benefit educators in several ways, such as speeding up the innovation process in education, stimulating fresh teaching ideas, improving learners' experience, widening access to skills and resources, etc..

We are used to single-disciplinary approaches in imparting education. Issues in the current social scenarios show that it is increasingly difficult to address them by relying on a single disciplinary theoretical perspective. Issues are too broad or complex to be dealt with adequately and ethically by a single discipline. In a multidisciplinary approach, a breakdown of a problem into different segments of its various disciplines and finally arrive at an additive approach with a solution. Interdisciplinary research results in innovations. Teams or individuals that integrate information, data, techniques, tools, perspectives, concepts, and/or theories from two or more disciplines are needed to solve problems. Blurring traditional disciplinary boundaries will foster the development of interdisciplinary research strategies to enhance approaches to teaching and learning.
