Significance of Educational Psychology in the Process of Teaching and Learning

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Abstract: The applied subfield of psychology combining with education is known as educational psychology. Educational psychology assists teachers in planning lessons and assessing students' progress. The historical process of merging psychology with education and progressively created as educational psychology. The study of educational psychology looks at a variety of topics pertaining to how people learn and are taught from birth to old age. The study of educational psychology plays a significant role in supporting and advising educators to ensure that students learn as intended. Teachers and aspiring teachers can learn significantly from educational psychology. The effectiveness of the learning process is deeply enhanced by educational psychology in the classroom.

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Introduction

Educational psychology is a significant subfield of psychology that focuses on the growth of children and adolescents. It investigates the factors influencing people's personal development and growth. It assists teachers in planning lessons and assessing students' progress by assisting them in understanding what students need to achieve.

"Give me a dozen healthy infants, well-formed, and my own specified world to bring them up in and I'll guarantee to take anyone at random and train him to become any type of specialist I might select—doctor, lawyer, artist, merchant-chief, and, yes, even beggar-man and thief, regardless of his talents, penchants, tendencies, abilities, vocations, and race of his ancestors. I am going beyond my facts and I admit it, but so have the advocates of the contrary and they have been doing it for many thousands of years." - John B. Watson

The word psychology, which is derived from the two Greek words psyche (soul) and logia (science of study), is formed by combining the Greek words psychē and logia; so, psychology is the study of souls. As per J.B. Watson’s definition, Psychology is the "Science of Behavior"; and in the words of McDougal, psychology is a science that tries to help us comprehend and regulate an organism's behavior as a whole. The scientific study of the mind and behavior is hence known as psychology. According to Boyack, Klavans, and Borner (2005), psychology is regarded as a "Hub Science" with close ties to the social sciences, medical sciences, and educational fields.

Then, education is defined as the act or process of learning broad knowledge, refining one's ability to think and make decisions, and overall preparing oneself or others intellectually for maturity.

The applied subfield of psychology that combines psychology and education is known as educational psychology. Psychology is a scientific field that studies human learning, including both cognitive and behavioral aspects. Its principles, laws, and techniques are applied to the development of educational strategies, teaching-learning situations, results, and findings.

The scientific field of educational psychology makes use of psychological concepts and instruments to comprehend how learners, teachers, learning tasks, learning environments, and educational settings interact in order to alter or influence the behaviors of learners in classroom settings.

Emergence and Development of Educational Psychology

As viewed and cited by Wright and Buchanan (2019), Educational psychology emerged during the late nineteenth to early twentieth century (Charles 1987). A wider movement of "progressive" educational ideas and social reforming practices, especially in North America, Great Britain, and continental Europe (Charles
1987), as well as a general shift toward specialization and the "scientification" of knowledge (Klein 1990), were all factors in its development. Psychology had also evolved from a subfield of philosophy to an independent discipline (Wooldridge 2006). The development of psychology as a field and educational psychology specifically is recognized to have benefited from pre-nineteenth-century antecedents, which range from Ancient Greek philosophers like Aristotle to Renaissance and Enlightenment thinkers like Bacon, Rousseau, and Descartes (Charles 1976; Evans 1969).

The emergence of educational psychology as a disciplinary specialism is attributed to historical sources that date back to the late nineteenth century, a time when psychology was forging its own identity apart from physiology and philosophy (Charles 1987; Hilgard 1996). The historical process of merging psychology with education and progressively creating an independent field is known as the creation of educational psychology. As the 19th century came to a conclusion, educational psychology emerged as a distinct field of study.

Throughout the history of education, numerous educators have tailored their instruction to the psychological states of their students. For example, the educational psychology theory of "I am not to give people knowledge, but to make knowledge produce its own midwife" was advanced by the ancient Greek educator Socrates, and the Chinese educator Confucius proposed the teaching technique of "no anger, no revelation, no explanation."

According to the book General Education (1806), Herbart claims to have been the first academic to formally suggest psychology as the theoretical underpinning of teaching. He wrote the Outline of Education in 1835, which included several concepts from educational psychology. The establishment of educational psychology has been greatly aided by his attempt to integrate psychology and education. The field of educational psychology developed subsequently thanks to the work of numerous educators and psychologists, including Thorndike. Education psychology thus gained official recognition as a separate field of study.

Furthermore, the development period of educational psychology began in the 1920s and continued until the 1950s. At this point, educational psychology incorporates research findings from psychometrics and child psychology studies. Over time, subject psychology becomes a crucial component of educational psychology. Educational psychology now covers a wider range of topics. Thus, education psychology has been steadily developing and improving since the 1960s.

The Role of Educational Psychology

The speedy expansion of science and technology needs individuals to acquire their maximum potential. The study of educational psychology looks at a variety of topics pertaining to how people learn and are taught from birth to old age, with a focus on the impact of environment on learning and teaching (Amin, 2005).

It is necessary to understand how education functions in order to become a teacher or to teach. The educator needs to be aware of the state of their students with relation to both inherited (innate) problems and those influenced by the local social milieu.

The learning environment itself has a significant impact on what makes for effective and efficient teaching and learning. In this instance, the physical state, social circumstances, family economic circumstances, and the surrounding environment are all included in the learning climate. Furthermore, it is important to correctly examine and comprehend the issue of students' mental states, which includes their interests, capabilities, attitudes, values, personality features, and range of abilities. These circumstances are intimately linked to educational psychology's existence.

Individuals have a good comprehension of the phenomena that appear on the surface, as well as the nature, definition, and objectives of educational psychology. Amin (2005) states that educational psychology performs the following roles or responsibilities:

- A professional and competent approach to teaching and learning will be prepared by educational psychology for future educators.

- The demands of educational growth are taken into consideration while developing and improving the curriculum in schools. Educational psychology plays a role in this process by providing teachers with guidelines for effective teaching and learning processes that suit their students.
The concept and execution of administrative and instructional monitoring, which leaders and school owners will carry out to manage the seamless operation of education in schools in accordance with the requirements of the applicable curriculum, can be influenced by educational psychology.

Educational psychology endeavors to provide guidance to educators and aspiring educators regarding the causes of certain phenomena, problem-solving techniques, and the essential activities that are deemed necessary for learning.

Significance of Educational Psychology

The majority of definitions focus on the idea that educational psychology is a subfield of psychology that focuses on enhancing the procedures and outcomes of education in order to help teachers teach more effectively and students learn more efficiently with the least amount of work. With its broad scope and scientific foundation, educational psychology supports educators in achieving their personal and professional goals. Additionally, it aids in the teachers' comprehension of the student, the learning environment, and the learning process.

It is supposed that a person who aspires to become a successful doctor needs to possess the necessary professional training, expertise, and understanding of the type of patient they intend to treat. In a similar vein, one needs to be knowledgeable with the science of student behavior if one is to hope to become a great teacher. Children go through several developmental phases, including childhood, adolescence, and infancy. Each of these stages of growth has unique qualities. Knowing these traits will enable the aspiring educators to use them to train students and shape their behavior to meet the objectives of education. The process of teaching and learning requires an understanding of educational psychology.

The study of educational psychology plays a significant role in supporting and advising educators to ensure that students learn as intended. The use of psychological principles in the field of education is one of the advantages of educational psychology for learning. Teachers can help students acquire some learning experiences to develop their personalities and maturity by applying psychological concepts. It is crucial to realize that educational psychology plays a significant role in the teaching and learning process. Teachers should prioritize having knowledge and comprehension of educational psychology since they are the front-runners in the educational process.

There is no one philosophy that dictates how lessons are taught in the classroom. It is connected to and makes use of several teaching-learning theories. To effectively plan his classroom instruction, a teacher needs to be knowledgeable about a variety of theories. Through educational psychology, they can learn about the various strategies that have been developed to address the challenges associated with teaching at various age levels.

The Advantages of Educational Psychology for Teachers

It is well acknowledged that teachers and aspiring teachers can learn greatly from educational psychology. The effectiveness of the learning process is greatly enhanced by educational psychology in the following circumstances:

Individual Differences in Students: Each student in a class has unique traits, thus a teacher has to manage a group of students carefully. In order to design a learning process that is both successful and efficient, it is crucial to comprehend the distinct qualities of these students at different stages of growth and development. Teachers and aspiring teachers can benefit from educational psychology by better understanding the unique qualities of these children.

Conducive conditions for classroom learning: A thorough awareness of the classroom environments utilized during the teaching process is highly beneficial to the teacher's ability to instruct students. To ensure that the learning process proceeds smoothly, the teacher must establish a favorable learning environment. To improve teaching and learning outcomes, a teacher needs to be knowledgeable about various teaching philosophies and methodologies. The field of educational psychology is involved in assisting educators in fostering a positive socio-emotional environment in the classroom.
Learning Techniques and Strategies: The features of student growth are taken into consideration when choosing teaching strategies. Teachers can benefit from educational psychology's assistance in choosing effective teaching tactics that take into account each student's unique qualities and features.

Guiding To Students: In the classroom teachers have to play different roles, like guiding students, in addition to carrying out the curriculum. Guiding students is one kind of assistance to resolve students’ issues. Teachers who possess an understanding of educational psychology are better equipped to offer students of different ages the learning and career help they require.

Learning Outcomes: Teaching and assessing are two crucial tasks that teachers must complete in the classroom. Measuring student learning outcomes is made easier by evaluation activities. Educators can create more equitable student learning assessments with the aid of educational psychology.

Learning Objectives: Learning objectives are the behavioral shifts that students undergo as a result of their education. As a learning objective, educational psychology assists the instructor in identifying the ideal type of behavior modification.

Learning Media: Teachers must be knowledgeable about educational psychology in order to carefully plan the learning materials that will be used. It is supposed to use audio-visual materials to provide students a realistic picture.

Study Schedule: It is imperative to organize the lesson plan in accordance with the students' psychological needs. In particular, courses like mathematics that are thought to be challenging for the students are introduced to the material at the beginning of the session, when students are still engaged and eager to learn. Planning, arranging, and assessing instructional strategies in classrooms is generally assisted by educational psychology.

Conclusion

Therefore, the applied subfield of psychology that combines psychology and education is known as educational psychology. Educational psychology is a significant subfield of psychology that assists teachers in planning lessons and assessing students' progress. Psychology is a scientific field that studies human learning, including both cognitive and behavioral aspects. The historical process of merging psychology with education and progressively creating an independent field is known as the creation of educational psychology; and at the end of 19th century, educational psychology emerged as a distinct field of study.

The study of educational psychology looks at a variety of topics pertaining to how people learn and are taught from birth to old age. The educator needs to be aware of the state of their students with relation to both inherited (innate) problems and those influenced by the local social milieu. The study of educational psychology plays a significant role in supporting and advising educators to ensure that students learn as intended. The use of psychological principles in the field of education is one of the advantages of educational psychology for learning.

Thus, it is greatly acknowledged that teachers and aspiring teachers can learn significantly from educational psychology. The effectiveness of the learning process is deeply enhanced by educational psychology in the classroom. The Significance of Educational Psychology in Teaching/Learning Process is immense and greatly influenced.

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