

Concepts in Educational Sciences, Counseling, and Guidance

- ✓ **Education:** The process of facilitating learning or the acquisition of knowledge, skills, values, morals, beliefs, and habits. Educational methods include teaching, training, storytelling, discussion, and targeted research.
- ✓ **Learning:** The process of acquiring new knowledge, skills, behaviors, values, and attitudes.
- ✓ **Teaching:** The process of providing knowledge, skills, and values to others.
- ✓ **Pedagogy:** The art of teaching. It is the way of how to teach effectively and efficiently.
- ✓ **Guidance:** The process of helping individuals to make effective decisions about their education, career, and personal development.
- ✓ **Counseling:** The process of providing professional services (educational, psychological, social) to individuals. Therefore, counseling is a professional relationship between a counselor and a client that aims to help the client achieve their goals.
- ✓ **School Guidance and Counseling:** A program that provides guidance and counseling services to students.
- ✓ **Career Guidance and Counseling:** A program that provides guidance and counseling services to individuals for choosing a career and develop the skills and knowledge necessary to succeed in that career.
- ✓ **Motivation:** The factors that influence a student's process to learn.
- ✓ **Academic advising:** The process of helping students choose courses and plan their academic careers.
- ✓ **Personal counseling:** The process of helping students with personal problems such as anxiety, depression, or relationship issues.

- ✓ **Social counseling:** The process of helping students with social problems such as bullying or peer pressure.
- ✓ **Career counseling:** The process of helping students make career decisions.
- ✓ **College counseling:** The process of helping students with the college application process.
- ✓ **Research methodology:** the systematic process of collecting and analyzing data to answer questions. It involves a variety of methods, including surveys, experiments, and case studies.
- ✓ **Research question:** a question that the researcher seeks to answer through the research study. It should be clear, concise, and researchable.
- ✓ **Literature review:** a critical review of the studies on a particular topic. It helps the researcher to identify the gaps in the literature and to develop a research question.
- ✓ **Data collection:** The process of gathering data to answer the research question.
- ✓ **Data analysis:** The process of organizing, interpreting, and summarizing the data collected.
- ✓ **Research findings:** the conclusions that the researcher draws from the data analysis.
- ✓ **Research limitations:** The factors that may have limited the generalizability or validity of the research findings.
- ✓ **Research hypothesis:** a statement that predicts the relationship between two or more variables.
- ✓ **Research concepts:** The important variables or words of study.
- ✓ **Research objectives:** The specific goals that the researcher hopes to achieve through the research study.

• *Educational Neuroscience*

Educational neuroscience is an interdisciplinary field that studies the neural mechanisms underlying learning and education. It is a relatively new field, but it has already made significant contributions to our understanding of how the brain learns.

Relationship between Educational Neuroscience and other fields

Educational neuroscience draws on a variety of disciplines, including:

- **Neuroscience:** The study of the nervous system.
- **Psychology:** The study of the mind and behavior.
- **Education:** The study of teaching and learning.

Educational neuroscience and Neuroscience

Educational neuroscience has a close relationship with neuroscience. Neuroscience provides educational neuroscientists with the tools and techniques they need to study the brain.

Contribution of Neuroscience to Educational Neuroscience

Neuroscience has made significant contributions to educational neuroscience. For example, neuroscience research has shown that:

- The brain is constantly changing and adapting in response to experience.
- Learning is a complex process that involves many different brain regions.
- There are individual differences in how people learn.

Educational implications of Neuroscience

The findings of neuroscience research have important implications for education. For example, these findings suggest that:

- Educators should provide students with opportunities to learn in a variety of ways.

- Educators should be aware of the individual differences in how students learn.
- Educators should create a positive and supportive learning environment.

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