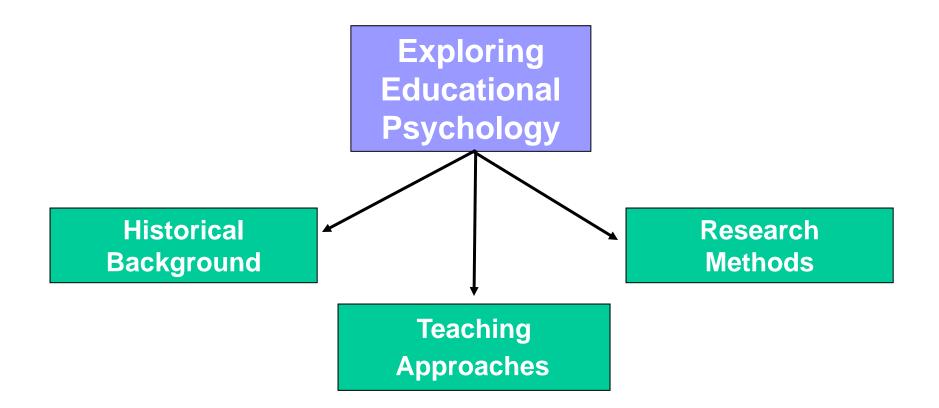
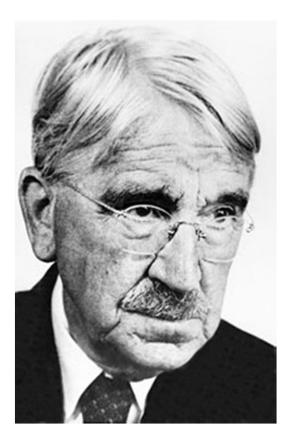
# Educational Psychology: A Tool for Effective Teaching

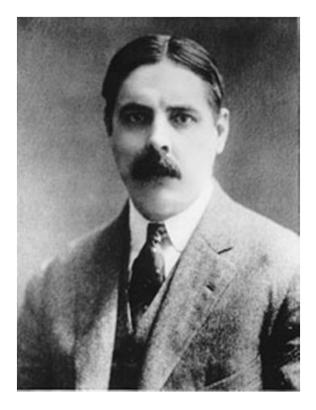


# John Dewey (1859-1952)



- Viewed the child as an active learner
- Argued children learn best by doing
- Emphasized the child's adaptation to the environment
- Pushed for competent education for all children

## E. L. Thorndike (1874-1949)



- Initiated an emphasis on assessment and measurement of learning
- Promoted the idea that educational psychology must have a scientific base and that measurement should be a central focus

# The Behavioral Approach

- B.F. Skinner (1938)
- Psychology as the science of observable behavior and controlling conditions
- Educational goals: Determine the best conditions for learning

## The Cognitive Revolution

- The Computer Metaphor
- Attention, memory, problem solving
- Educational goals: Effective information processing

# The Social Context of Learning

- Cognitive Apprenticeship
- Modeling of skills
- Cooperative learning in the classroom
- Educational goals: Enhance learning through guided experience on intellectual tasks

# **Teaching Approaches**

#### **The Constructivist Approach:**

- A learner-centered approach that emphasizes the individual actively constructing their knowledge and understanding
- Teachers guide children's exploration of their world, fostering discovery learning
- An emphasis on collaboration children working with each other in their efforts to know and understand

# **Teaching Approaches**

#### **The Direct Instruction Approach:**

- A structured, teacher-centered approach characterized by teacher direction and control
- An important goal is to maximize student learning time
- Effective teachers use both a constructivist and direct instruction approach depending on the circumstances and individual student needs

# **Teaching Approaches**

#### **Differentiated Instruction:**

- Approach recognizes individual variations in knowledge, readiness, interests, etc.
- Emphasizes tailoring assignments to meet students' needs and abilities
- Advocates discovering "zones" or "ballparks" in which students in a classroom cluster

# How to promote self-motivated students?

- Provide real-world learning opportunities
- Select learning opportunities of optimal difficulty and novelty
- Allow students make choices in line with their personal interests
- Give students the opportunity to think creatively and deeply about projects

## **Research Methods**

#### **Descriptive Research**

- Observations
  - O Laboratory
  - O Naturalistic observation
- Interviews and questionnaires
- Standardized tests
- Case Studies

## **Research Methods**

#### **Correlational Research**

- Measures the strength of a relation between two variables
- Does <u>Not</u> establish causal relation

#### **Experimental Research**

Manipulates one or more variables believed to influence behavior while all other factors are controlled

#### Does establish causal relation

## **Experimental Research**

#### **Independent variable:**

The manipulated, influential experimental factor.

#### **Dependent variable:**

The factor that is measured in an experiment.

#### **Experimental group:**

The group whose experience is manipulated.

#### **Control group:**

A comparison group, no manipulation.

#### **Random assignment:**

Participants are assigned to groups by chance.