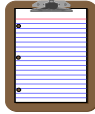


Overview of Ch1: Learning, Teaching, and Educational Psychology

- ◆ Concerns of beginning teachers
- ◆ The Role of Ed Psych
- ◆ What is good teaching?
- ◆ How research informs teachers
- ◆ Data collection methods
- ◆ Research designs



1

Concerns of Beginning Teachers

- ◆ Classroom discipline
- ◆ Motivating students
- ◆ Accommodating differences
- ◆ Evaluating student work
- ◆ Dealing with parents
- ◆ “Reality shock”



2

The Role of Ed Psych

- ◆ What is Psychology? What is Educational Psychology? What Methods does it use to answer questions in the field? (Ch1)
- ◆ What Topics does it address?
 - Understanding the Learners: Normative child development, and how children differ (Ch 2, 3, 4, 5)
 - The Learning Process: Approaches to learning & instruction (Ch 6, 7)
 - Everyday Problems of Education: Motivation & Classroom Management (Ch 10, 12)
 - Assessment of Learning (Ch 14)

3

What is Good Teaching?

- ◆ What do you think?
- ◆ What do “expert teachers” know?
 - Content
 - General teaching strategies
 - Curriculum
 - Subject-specific knowledge
 - Learners
 - Settings
 - Goals & purposes of teaching
- ◆ Art or Science?



4

How Research Informs Teachers

- ◆ Common Sense vs. Research
 - Taking turns in primary reading class
 - Classroom management: student movement
 - Skipping grades
- ◆ Hindsight bias, confirmation bias, selective attention, selective memory, biased attributions
- ◆ Why Learn Theories?



5

Types of Research

- ◆ Methods of Data Collection
 - Surveys, Observations, Participant observations, Case studies, Ethnographies
 - Critical Thinking about Methods: Strengths and weaknesses in each
- ◆ Research Designs
 - Correlational research and Experimental research
 - Critical Thinking about Designs: Each addresses a different question

6

Correlational Design

- ◆ Begin with a research question and a hypothesis
- ◆ Randomly select subjects
- ◆ Measure: Assess levels of two variables and sum up pattern of co-variation in a correlation coefficient (r):
 - Range is -1.0 to +1.0
 - Size of r indicates the strength of the relationship
 - The sign (+ or -) or r indicates the direction of the relationship
 - » Positive = same direction
 - » Negative = opposite directions
- ◆ Test for statistical significance: How likely is it that the pattern of co-variation between the two variables is a chance occurrence in this particular sample?
- ◆ Make Conclusions: Definitive conclusions about the impact of one variable on another **NOT** possible.
Why?

7

Experimental Design

- ◆ Begin with a research question and a hypothesis
- ◆ Randomly select subjects
- ◆ Randomly assign subjects to groups
- ◆ Manipulate level of IV in the groups
- ◆ Measure: Assess level in DV in the groups
- ◆ Test for Statistical significance: How likely is it that the difference between the groups in the DV is a chance occurrence in this particular sample?
- ◆ Make Conclusions: Causal conclusions about impact of IV on DV possible.
Why?

8
