

# Measuring Variables

- If something is to be measured, it should be a variable.
- Some variables can be directly observable (e.g., Weight, height ) Others are not in that type ( intelligent level of a student or Mathematics performance level of a student).
- A variable can be a continuous variable (e.g., height of a person) or a discrete variable(e.g., Number of students in the classroom).
- Most of the variables in the education field are continuous and not directly observable (e.g., Intelligence, Mathematics achievement).
- In Education we measure personality attributes such as academic achievement, intelligence, aptitude, attitudes, skills etc.

# What is Measurement

- In Education we measure personality attributes such as academic achievements, intelligence, aptitude, attitudes, skills etc.
- Measurement is assigning numbers to an object or event according to a rule.

Stanly Smith

- Measurement is the assigning numbers to the results of a tests or other types of assessments according to a rule.

N. E. Gronlund

# Educational Measurement is indirect

- Personality attribute that we measure in education can't be observed directly.(eg intelligence of a person)
- We observe behavior of a person which is assumed to be originated from a certain attribute and assign marks according to a rule to indicate the level of that attribute the person has.
- Physical attributes such as height, weight, income etc. can be directly observed and therefore can be directly measured.

