

# Methodology of pedagogical research and evaluation:

## 7. Measurement techniques in pedagogical research, research tools, validity, reliability

Methodological Concept for Effectively Supporting Key Competencies  
Using the Foreign Language ATCZ62 - CLIL as a Learning Strategy at the  
College

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# ✓ RESEARCH METHODS

✓ Have the properties: validity + reliability

✓ Within each method, a specific research tool can be created

# Validity

- ✓ The ability of research tools what they have
- ✓ Types:
  - content
  - constructive
  - criteria (concurrent and predictive)
  - internal
  - external

# Reliability

- Accuracy and reliability of the research tool.
- How to determine the reliability of the research tool?

## Repeated measurements

- equivalent forms of research tool,
- internal consistency,
- consensus among judges.

# RESEARCH FILE

Are called research entities - the basic set (POPULATION).

- **Random** selection (draw, random number table)
- *Stratified* selection is a specific type of random selection - the base file is decomposed according to an essential character.

As for the number of subgroups, this selection may be:

- a. Proportional (it is used by agencies that identify eg citizens, election preferences,
- b. Even.

Sample Range = n  
(E.g., n = 112)

Depends on:

- Required reliability,
- Required accuracy,
- Basic file variability.

**Big Pitfalls - Uncontrollable Variables.**