ACTION RESEARCH FOR EDUCATORS
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- Quantitative
    - Experimental
    - Causal comparative
    - Correlational
    - Descriptive or survey

- Qualitative
    - Historical
    - Ethnography
    - Phenomenology and cultural
    - Case studies

- Steps
    1. Problem Statement (Initial Diagnosis)
    2. Data Collection
    3. Analysis and Feedback
    4. Action Planning
    5. Taking Action
    6. Evaluation and follow-up

- Hindrances to accurate observations
    - Hawthorne Effect: Giving attention to people will cause their performance to improve
    - Halo Effect: Tendency to always view subjects positively or negatively
    - Leniency Effect: Tendency to give high observational ratings to all subjects – even when differences exist
    - Recency Effect: Tendency to give more emphasis to recent behaviors during the observational period
    - Central Tendency: Reluctance to rate subjects either high or low and give average ratings
    - Rater Indecisiveness: Inability to make categorical judgments about the subjects
    - Personal Bias: Tendency to rate subjects based upon the observer's own prejudice
    - Contamination: Any conditions that alter the natural setting of the subject's performance, which is being observed
    - Observer Omission: Inability of the observer to record all necessary subject behaviors
    - Observer Drift: Tendency for observers to lose their concentration and fail to record information
    - Intra-observer Reliability: Failure of the observer to consistently agree with his or her observational recordings
    - Inter-observer Reliability: Failure of the observer to agree with other observers in collecting data
    - Criterion-Related Observer Reliability: A failure of the observer to record data that is in agreement with an established expert's criteria
- Processing is a method of data collection that is especially useful for analyzing situations and learning.
    - Team Building: A structured session where team members exchange ideas, brainstorm causes for problems, and make action plans for improvement.

- Brainstorming: A structured approach whereby individuals meet to collectively generate possible causes for problems and ideas for solutions
- Story Boarding: A problem-solving process whereby groups develop visual displays to diagram possibly causes and solutions to problems
- Cause and effect diagram: To portray, using a fishbone diagram, potential causes and effects of a problem
- Force Field Analysis: The field theory technique used to identify the hindering and supporting elements of a problem, which can be used for change and decision making

- Threats to Validity
  - History: Effects on data when collected at different points in time
  - Maturation: Physical, mental or psychological development of people that affect the data collection
  - Instrumentation: The negative effects of the method used to collect data
  - Attrition: The loss of participants during the study
  - Testing: The negative effects of a pretest on data collection
  - Differential Selection: The negative effects of comparing dissimilar groups
  - Hawthorne Effect: Attention given to people that motivates them to perform better
  - Researcher Bias: The researchers' unconscious or conscious preference that affects the outcome of a study
  - Contamination: Any factors that negatively impact on the natural setting of the study