

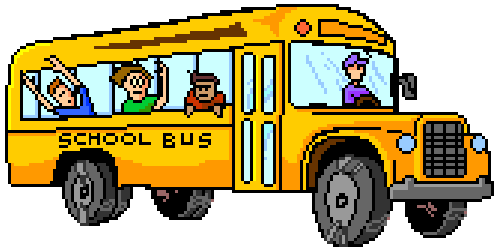
**SP_IRS Introduction to Research in Special and
Inclusive Education(Autumn 2016)**

Lecture 1: Introduction

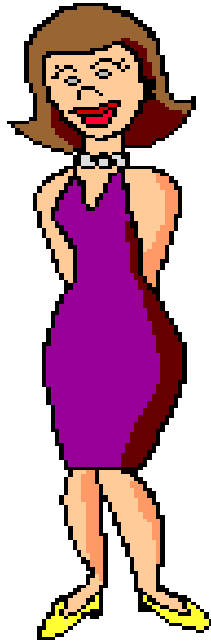
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Master of Inclusive Education

Welcome



Presentation Outline



Introduction to
International Research
of Research
MS.
Conclusion.



Introduction

- Classroom teachers are consumers of educational research
- Research is one mean of seeking answers to questions.
- Therefore have to know basic understanding of concepts /key terms related to notion of research
- Questions arises constantly through out a day . It may be personal/ professional
- When we have to look for answers we have to

Consult sources for answers

- Convenient
- Comfortable

However these sources have the potential to be fraught with problems.

Familiar sources of Information

Tradition

- Ways in which we have behaved in the past. Interventions that have worked in past may in fact still work today., BUT there is no guarantee, in addition there may now be newer interventions that will work better than our old standby

Authority

- Refers to the use of the opinions of experts , whom we assume will know what will work best. However, simply finding someone who has a strong opinion about a given intervention does not necessarily support the use of that strategy.

Common sense

- Refers to the use of human reasoning as basis for answering questions
- Global culture throughout history
- Reliant and dependable information
- Information collected if it is of substandard quality or accuracy it will reflect on those various deficiency

Problems with the familiar sources

- Tendency to provide unreliable information.
- Biased to some degree.
- Bias occurs
 - Information collected in an unsystematic way and subjective manner.

For accurate answers and high quality work

we need to obtain information that is valid and reliable

Types of research

Scientific method – systematic way of answering questions more objectively.

- Is a specific strategy used to answer question and revolves problems.
- Systematic and has got step by step set of procedures
- Dewey (1938) scientific method is a procedure for thinking for objectively .

Procedures

1. Clarify the main question inherent in the problem
2. State a hypothesis
3. Collect, analyse and interpret information related to the question, such that it will permit you to answer the question.
4. Form conclusion derived from your analysis
5. Use the conclusion to verify or reject the hypothesis.

Educational Research

- Involves the application of the scientific method to educational topics , phenomena, or questions in search of answers.

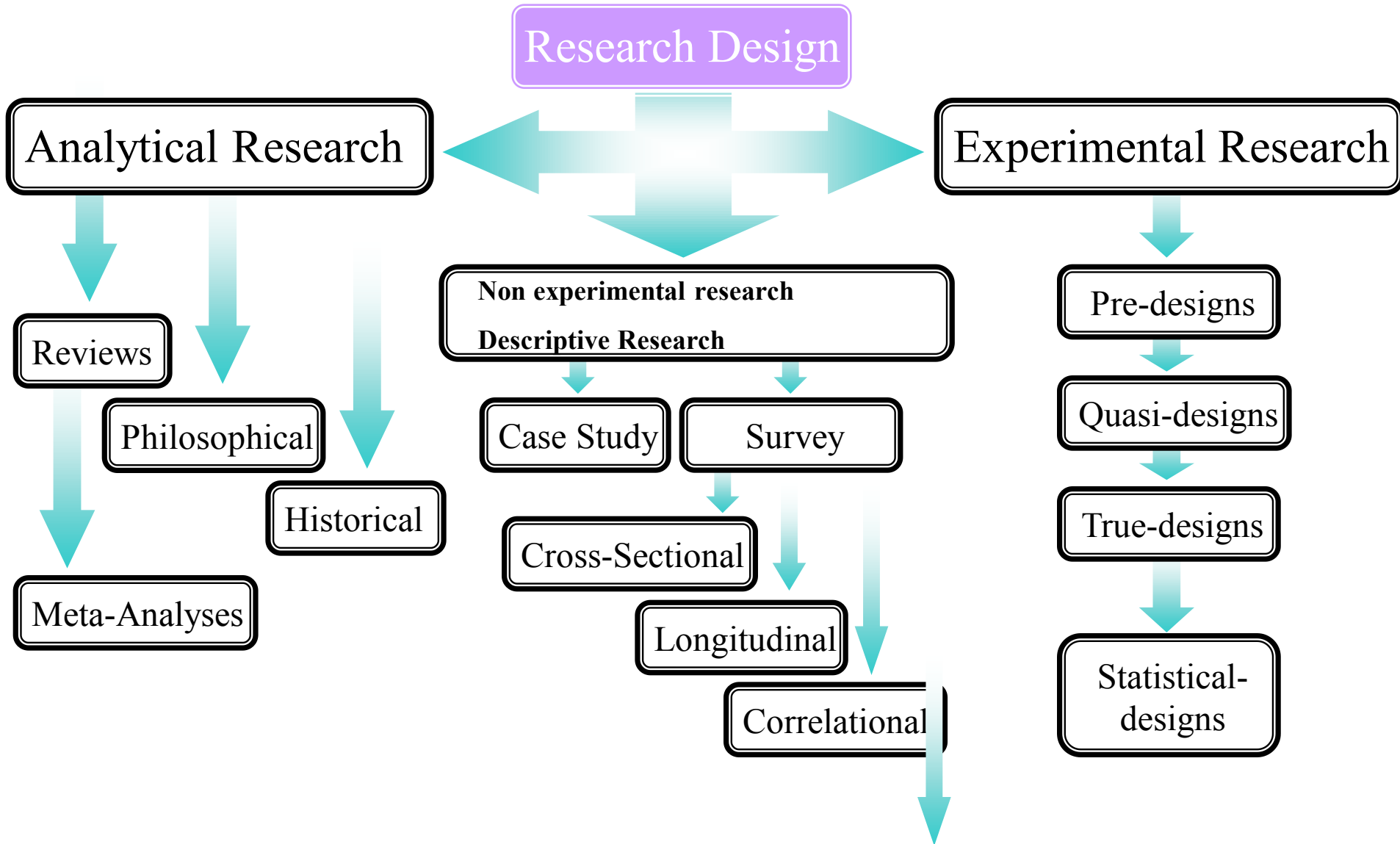
Educational Research procedures

1. Specify the topic about which a concern exist
2. Clarify the specific problem on which the research will focus.
3. Formulate research questions and /or hypotheses concerning the main problem
4. Carry out procedures by which data (a more appropriate term for information) are collected analysed and interpreted.
5. State the findings determined as a result of the data analysis.
6. Draw conclusion related to the original research questions and/ or hypothesis

Research Design

- refers to the plan, structure, and strategy of research--the blueprint/road map that will guide the research process.

Research Design Continuum



Analytical Research Designs

- Reviews
 - A critical account of present understanding
 - A meta-analysis is a quantitative method of review
- Historical Research
 - Accessing both primary (e.g. witnesses) or secondary (e.g. literature) sources to document past events.
- Philosophical Research
 - Organising existing evidence into a comprehensive theoretical model.

Non experimental research Design

- The researcher has no direct control over any variable the study
- Reasons

It has already occurred not possible for it to be influenced

- Variables cannot be controlled or manipulated by the researcher
- For example: study of school discipline and absenteeism problem in schools, as the type of grade configuration, the number of discipline referrals and the number of absenteeism cannot be controlled by the researcher.

Examples of Non experimental research designs

- Descriptive-studies simply report information about the frequency or amount of something. E.g. what percentages of time do teachers use for assessments in their classroom?
- Comparative – studies characteristically build on descriptive studies by comparing two or more groups to that which is measured. E.g. Is there a significant difference between primary and secondary teachers use class based assessments?
- Correlation – studies measure the degree to which a relationship exists between two or more variables. E.g. What is the relationship between years of teaching experience and use of CBA?
- Casual Comparative studies where group is determined by something that has occurred in the past. E.g. Pre-service students at FNU use authentic assessment in classroom more than the teachers who did not complete such a course.
- Survey
 - Cross-sectional: Status of various groups at a given point in time
 - Longitudinal: Status of a given group at various points in time
 - Correlational: Relationships between variables

Experimental research

- The researcher has control over the one or more variables included in the study that may somehow influence (or cause) the participants behavior .
- Independent variables the researcher has control on, the researcher determines the subject which will receive condition.
- Dependent is what will be measured; it's what the investigator thinks will be affected during the experiment.
- Control variable is the third variable, the values of which may affect the relationship between two other variables.

Experimental research example

- The effectiveness of a new math program was being investigated, those students exposed to the new program would constitute the experimental or treatment group., their performance would be compared to a control group that receives the standard math instructions.
- The ultimate variable of interest i.e. the behavior and math achievement is referred as the dependent variable (since its value depends on the value or group membership of the independent variable).

Quantitative and Qualitative Research Designs.

Quantitative

- Research that involves numerical data

Qualitative Research

- Research that involves collection of data that are analyzed and reported verbally

Quantitative Research Designs

Descriptive statistics

- Allows researchers to summarize, organize and simplify data
- Techniques used basically SPSS

Mean, mode, range. Sd, correlations and standardized scores.

Inferential Statistics

- are more complex and permit researcher to test the statistical significance of the difference between two or more groups.
- Test the degree of correlation between two variables.

Statistical Significance

- A decision made from the statistical procedures that enable the researchers to conclude that the findings of a given study are large enough in the sample studied in order to present a meaningful differences or relationship in the population from which the sample was drawn.

Qualitative Research Designs

It uses systematic observation, multiple measures in order to gain knowledge, reach understanding and answer research questions and also permits triangulation.

- Phenomenological studies – engage the researcher in a long process of individual interviews in an attempt to fully understand a phenomenon. E.g. what characteristics of teachers are needed in order for them to be viewed as compassionate by their students?
- Ethnographic- attempts to describe social interaction between people in group. E.g. what meaning does the teachers lounge have for the staff at Lautoka Central School?
- Grounded theory research studies attempt to discover a theory that relates to a particular environment . E.g. What type of personal and school characteristics serve to motivate teachers?

- Case studies

Are in depth studies of individual programs , activities , people, or groups

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Mixed- methods research designs

The combination of both types of data tends to provide a better understanding of a research problem than one type of data in isolation

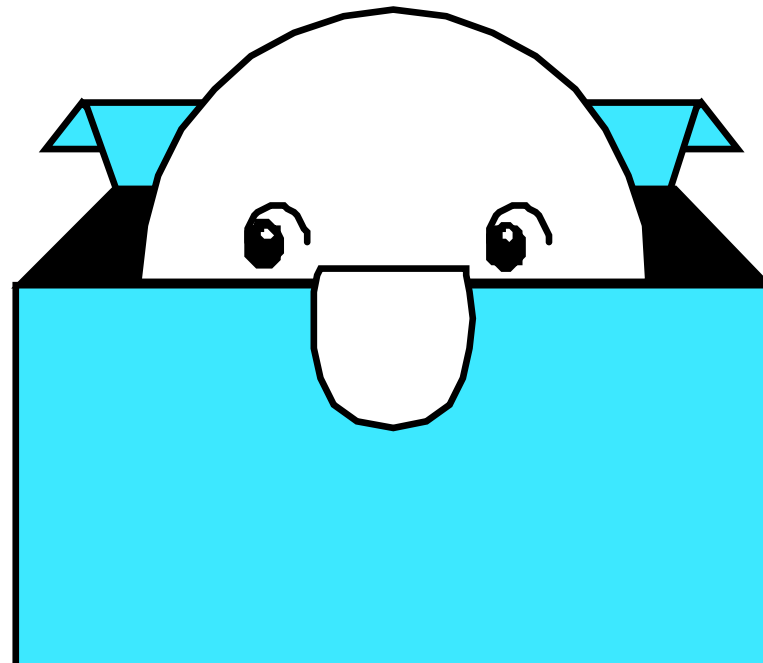
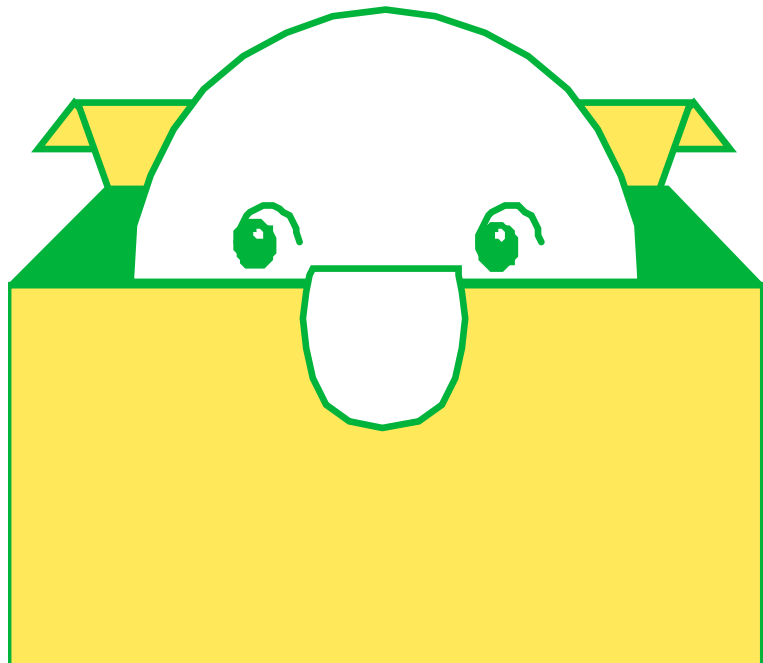
Action Research

- Any systematic inquiry conducted by teachers, administrators, counselors or others with a vested interest in the teaching and learning process.
- It's a systematic inquiry to one's practice
- Allows teachers to study their own classroom.
- The Basic process
 1. Identifying an area of focus.
 2. Collecting data.
 3. Analyzing and interpreting data.
 4. Developing a plan action.

Conclusion

- Research is a very broad topic so keep your discussion and be reflective in approach and you will excel as a 21st century teacher.

Questions or Comments





Thank
you!

Tutorial

- Research Topic
- Research Questions
- Research Design (why)

Tutorial activity

1. Specify the topic about which a concern exist
2. Clarify the specific problem on which the research will focus.
3. Formulate research questions and /or hypotheses concerning the main problem
4. Design your own research design for your research topic and why you think that this research design is suitable for your own research?