



सिद्धार्थ विश्वविद्यालय, कपिलवस्तु, सिद्धार्थनगर

Syllabus of Pre-Ph.D. course work

Subject: EDUCATION

Paper I : Research Methodology

Course Objectives

To enable prospective researchers to understand-

- 1- Nature, need and classification of Educational Research.
- 2- The formulation or research problem.
- 3- Purpose of the review of Literature.
- 4- Different methods & design of Education Research.
- 5- Various kinds of tools and tests for collection of data in different types of Educational Research.

Course Content

Section-A

- 1- Nature of educational research Need & significance, cross-sectional and longitudinal research in education, determining priorities in the field of educational research. Qualitative and Quantitative research. Fundamental Applied and Action research, case study and Ethnographical Research.
- 2- Selection and formulation of research problem. Guiding principles of problem selections, sources for locating the problem, statement of problem and determination. De limitation, variables and their operational definition.
- 3- Review of Related Literature and its need, significance and sources and library using skills.
- 4- Hypothesis and its need, forms of hypothesis and testing of hypothesis, characteristics of a good hypothesis
- 5- The concept of population and sample, methods of sampling, features of a good sample sampling errors and measures for reducing them
- 6- Methods of Educational research; Historical, Descriptive, Experimental and Philosophical
- 7- Tools of Data Collection Observation, Interview, Questionnaires, Psychological tests and Inventories, check list, rating scales, qualities of a good test
- 8- Preparation of synopsis of research project and writing of research report.

Books Recommended:

1. Asher, William: Educational Research and Evaluation Methods, Waitham: M. A. Little Brown, 1976
2. Best, John, W. : Research in Education, New Delhi Prentic Hall of India, 1982.
3. Bhatnagar, R. P. et al: Shiksha Anusandhan, Meerut: Loyal Book Depot, 1995.
4. Garrett, H. E.: Statistics in Psychology and Education, Bombay Vikils, Feffer and Simons Ltd. 1981.
5. Guilford, J. P. & B. Fruchter : Fundamental statistics in Psychology and Educations, London: McGraw Hill Kogakusha Ltd. 1978.
6. Karlinger, F. N.: Foundations of Behavioural Research, New Yprk Holt Rinehart and Winston, Inc. 1973.
7. Koul, Lokesh: Methodology of Education Research New Delhi, Vikas Publishing House, 1993.

Paper-II

Computer Application in Educational Research

Course objectives

To enable prospective researchers to understand:

- 1- Statistics techniques for the analysis and interpretation of data including SPSS;
- 2- The world of computers and their application in Educational Research;
- 3- The process of practical experiences in Educational Research.

Part-A

- 1- Fundamentals of Computer Application;
- 2- MS office, E-mail and list server, file transfer Protocol, Tell-net, World wide web, Browser, Web publishing, HTML, Search engines;
- 3- Collection of information through Inter-net;
- 4- Importance of e-learning for Educational Research;
- 5- Organization and Analysis of Data through computer specially through SPSS in calculation and interpretation of the following.

Part-B

- 1- Tabulation and graphical representation of data;
- 2- Measures of central tendency, Measures of variability: Range, Quartile percentile, Mean deviation and Standard deviation. Measures of relative position;
- 3- Correlation: Spearman's Rank Order and Pearson's Product- Moment Coefficient of correlation;
- 4- Normal Probability Curve, the properties and application, Skewness and Kurtosis;
- 5- Comparison of means of two groups through Critical-Ratio/t-test;
- 6- Chi-Square Test and its uses in Educational Research;

7- Analysis of Variance: Simple one-way analysis. Sign test, median test, square test.

Practical Orientation:

- 1- Two Research Proposals and their presentation;
- 2- Construction and evaluation of tools;
- 3- Survey of least 5 schools;
- 4- Data collection on the basis of one research proposal;
- 5- Analysis of Data by using qualitative or quantitative data;
- 6- Interpretation of Data;
- 7- Writing Research report: Chapterization, referencing, tabulation & appendix making and writing of bibliography;
- 8- Reviews of two books/papers etc.

Books Recommended:

Agrawal, Y. P. (1976), Sampling Method For Social Investigation, Ambala: Bharat Vidya Vihar.

Barrow, David H. & Michal Heslen (1984), Singh Case Experimental Design Strategies For Studying Behavior Change.

Bereday, George Z. F. (1967), Comparative Method In Education, New Delhi, Oxford.

Best, John W. & Kahn (2002), Research In Education, New Delhi: Prentice Hall Of India.

Bhatnagar, R. P. (Ed.) (2002) Readings In Methodology Of Research In Education Meerut: Surya Publishers.

Brouta, K. D. (1989): Experimental Design In Behavioural Research Wiley Eastern Limited, New Delhi.

Bryman, Alan (2007) Qualitative Research, New Delhi: Sage.

Carr, E. H. (1971): What Is History, London: Penguin.

Drew, Clifford J. & Michael L. Hardman (1985): Designing And Conducting Behavioral Research Program Press, New York.

Edwards, Allen L. (1971): Experimental Design In Psychological Research Amerind Publishing Co. Pvt. New Delhi.

Freeman, Frank S. (1965): Theory And Practice Of Psychological Theoty, New Delhi: Ocford.

Garette, H. E. (1981): Statistical In Psychology And Education, Bombey: Vakils Fetter And Simons. Ltd.

Gibaldi, Joseph (2004): Handbook For Writers Of Research Papers, New Delhi: East West Press.

Guilford, J. P. & B. Fruchter (1978): Fundamental Studies In Psychology And Education, London, Mc-Grow Hill.

Kaul, Lokesh (2007): Methodology Of Educational Research Vikas Publishing H Gouse, Pvt. Ltd.

Kerlinger, F. N. (1973): Foundations Of Behavioral Research New Delhi: Holt Rinehart.

Knowles, J. G. & Ardra L. Code (2008): *Handbook Of The Arts In Qualitative Research*, New Delhi: Sage.

Kothari, C. R. (2008): *Research Methodology Methods And Techniques (Second Edition)*, New Age International Publishers, New Delhi.

Martuza, Victor, R. (1977): *Applying Norm Referenced And Criterion Referenced Measurement In Education* Allyn & Becon Inc, Boston.

Miller, D. C. & Neil J. Salkind (2008): *Research Design And Social Measurement*, New Delhi: Sage.

Mouley, George J. (1970): *The Science Of Educational Research*, New York: Van Nostrand.

Singh, Pritam (2005): *Measurement And Evaluation*, New Delhi, Daaba House.

Thomers R. M. W. (1978): *An Introduction To Educational Research*, New York: Mac Milan.

Thorndike, R. L. And Elizabeth P. Hgen (1979): *Measurement And Evaluation In Psychology And Education*, New Delhi: Weley Eastern, Ltd.

Verma, M. (1965): *An Introduction To Educational And Psychological Research*, Bombay: Asia Publishing Home.

Wagner, William E. (2006): *Using Spss For Social Statistics And Research Method*.

Shukla, P. C.: *Experimental Research: Statistical Analysis Of Data*, In R. P. Bhatanagar (Ed.), *Readings In Methodology Of Research In Education*, Meerut: Surya Publications, 2002.

Verma, M.: *An Introduction To Educational And Psychological Research*, Bombay: Asia Publishing House, 1965.

Yadav, M. S. & S. K. Mitra (Ed.) : *Educational Research Methodological Perspectives*, Barodo: C A S E M S University, 1989.