

**CHAPTER-III**  
**RESEARCH METHODOLOGY**

### **3.0 INTRODUCTION**

Research design is an important component of research process. A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. A well-developed research design is the best course of action in research work. It guides the systematic scheduling of the time at which treatments are administered to subjects, at which observation are made of the performance of the subjects.

The research design is the conceptual structure within which research is conducted. It constitutes the blueprint for the collection, measurement and analysis of data. 'Research design is needed because it facilitates the smooth sailing of the various research operations, thereby making the research as efficient as possible yielding maximal information with minimal expenditure of effort, time and money. Just as for better, economical and attractive construction of a house a blueprint is needed (or what is commonly called the map of the house) well thought out and prepared by an expert architect, similarly a research design or a plan is needed in advance of data collection and analysis for our research.

### **3.1 METHODOLOGY OF THE STUDY**

Research methods are of utmost importance in a research process. They describe the various steps of the plan of attack to be adopted in solving a research problem such as the manner in which the problems are formulated, the definition of terms, the choice of subjects for investigation, the validation of data gathering tools, the collection, analysis and interpretation of data, and the process of inferences and generalizations.

#### **Design of the Present Study**

For the present study researcher has used the descriptive method

### **3.2 NEED AND JUSTIFICATION OF THE STUDY**

The teacher acts as the pivot for the transmission of intellectual traditions and technical skills from generation to generation and helps to keep the lamp of civilization burning"

Dr.Radhakrishnan

The teacher is the center point of any educational system. Teacher shapes and molds the personality of the child. A teacher should realize that all children are special and that they have both strengths and weaknesses. To meet their learning requirements effectively the teacher should have a thorough understanding of the nature of abilities or disabilities and the academic and non-academic problems exhibited by them. To render their jobs effectively they should be familiar with concepts of inclusion its characteristics teaching and training methods, guidance and counseling which are broadly classified under planning, teaching and guidance roles.

Teacher's role is very important not only in teaching and learning but also in teaching and organizing classrooms activities, extending helping hands to his or her colleagues, providing intensive guidance and counseling to the parents and assisting the children to overcome learning as well as social deficiencies. A teacher should possess thorough understanding and awareness about the concept and nature of inclusive education because this understanding and knowledge enable him or her to develop positive attitude towards this inclusion which leads to acquire or develop better self-efficacy to handle children in an inclusive classroom.

Teacher's awareness is labeled as very crucial factors for the successful practice of inclusion. So, teacher requires high level of awareness and high sense of self efficacy on various aspects of disabilities, causes and characteristics, identification and assessment, teaching and training methods and guidance and counseling to the children with special needs, their parents and community etc. Such a good level of awareness and high sense of self efficacy lead to better competencies in the teacher. A teacher with right type of awareness, competencies and self-efficacy is an asset to any institutions offering program for the children with special needs (CWSN).

Studies by many researchers have also reported the fact that Teachers with positive or negative awareness influence the success of inclusion practice of students with or without special needs. Behavior of the teachers in the class and efforts made by them in the class is always influenced by their self-efficacy beliefs. Teachers, who have positive awareness towards inclusive education, try to change, modify and learn new technologies, ways and methods to cater to the needs of all students with or without special needs. A good amount of studies has been done on the awareness, beliefs, perceptions and efficacy towards inclusive education in the foreign countries but still now not much work has been done on these aspects in India specially on Inclusive education.

Assessment of awareness, attitude and self-efficacy of teachers towards inclusive education is very significant and essential because literature shows that these variables are the forecaster of the success of inclusive practices in schools. An in-depth knowledge and understanding of these variables quite important and necessary because all these plays significant role in the planning of curriculum, pre and in-service training modules, policies and funding decisions.

### **3.3 UNIVERSE OF THE STUDY AND SAMPLING**

The word 'sample' means a part of any collection of things, individuals or results of operations that are quantitatively expressed. A totality or a collection of things or individua is said to constitute a population. Hence a sample simply means a part of a population. To draw certain conclusions about the characteristics of a population it is sufficient to select and study a part of it.

According to Rao (2008), the principle of selecting a sample and studying it is to acquire the maximum information about the population with the least amount of time, money and energy. In brief, maximum information with minimum effort is the goal of sampling.

### **3.4 METHOD AND PROCEDURE**

In drawing out the result of the study, it is necessary to plan the procedure and method to be used. It helps the researcher in acquiring the results of study. The purpose of the present study was to access the awareness of Pupil-Techers.

The study was conducted through descriptive method of research. The descriptive method was undoubtedly been the most popular and most widely used research method in education. The method requires sample and certain research tool to conduct the study.

### **3.5 SAMPLE**

Stratified random sampling technique was used for the study with the sample of 40 Pupil-Teachers, out of which 20 are boys and 20 are girls and 20 are from science and 20 are from arts stream.

### **3.6 HYPOTHESIS**

Ho 1: There is no significance difference between male and female Pupil-Teachers regarding their awareness towards Inclusive Education.

Ho 2: There is no significance difference between Arts and Science Pupil-Teachers regarding their awareness towards Inclusive Education.

### **3.7 TOOL**

In every research work, it is essential to collect factual material or data unknown or untapped so far. They can be obtained from many sources, direct or indirect. It is necessary to adopt a systematic procedure to collect essential data. Relevant data, adequate in quantity and quality should be collected. They should be sufficient, reliable and valid. For checking new, unknown data required for the study of any problem you may use various devices, instruments, apparatus and appliances. For each and every type of research we need certain instruments to gather new facts or to explore new fields. The instruments thus employed as means for collecting data are called tools. The selection of suitable instruments or tools is of vital importance for successful research. Different tools are suitable for collecting various kinds of information for various purposes.

In the present study a self-developed awareness questionnaire developed by investigator to check the awareness of pupil teachers towards inclusive education.

#### **3.7.1 CONSTRUCTION OF AWARENESS OF INCLUSIVE EDUCATION QUESTIONNAIRES**

Whenever the research study requires the assessment of certain attributes for which a readymade tool is not available, it becomes imperative to construct it. For the present study the researcher has constructed one tool.

##### **1. Awareness of Inclusive Education Questionnaire**

After an intense search for literature on Inclusive Education the researcher studied the various aspects like concept of inclusive education, legal aspects of inclusive education, identification of disabilities, skills and competences required for being aware of inclusive education. The researcher then pooled all relevant items for the questionnaire. While constructing the questionnaire the researcher ensured that items tested the student-teachers knowledge and understanding of the aspects of inclusive education. The items were objectives type and fill in the blanks type.

#### **3.7.2 AWARENESS QUESTIONNAIRES**

On the basis of the feedback and suggestions provided by the supervisor 20 items were selected. Among them 13 were multiple type and 7 were fill in the blank type awareness

questionnaire. It was considered to be a comprehensive tool to find out the awareness of the pupil-teacher.

The questionnaire on awareness about Inclusive Education tool has a four option. For each correct option the score was "1" and for incorrect option the score was "0".

Thus the maximum score that a student-teacher can obtain is 20 the awareness about Inclusive Education and the minimum score obtainable is 0.

### **3.8 PROCEDURE OF DATA COLLECTION**

Data collection is the actual process of collecting information that the researcher sets out to study, analyze and interpret. The researcher enjoyed the process of data collection and the opportunity to meet new people, thus getting an insight into the environment of teacher education college. The support, the response and the interest shown by all the principals was encouraging.

One of the teacher education institute of Angul district named as Nabakrushna Choudhury College of Teacher's Education, Angul was selected randomly and 40 students of B.Ed were selected from both science and arts stream. The data was collected using google form. The tool was scored properly and data was analyzed using appropriate statistical techniques.

### **3.9 STATISTICAL TECHNIQUES USED FOR DATA COLLECTION**

In the present study the researcher will use

- Mean
- Standard Deviation
- t-test

### **3.10 CONCLUSION**

This chapter has provided a description of the methodology used to complete the study and the rationale that prompted the use of descriptive method of research. The procedure for construction of the Awareness of Inclusive Education Questionnaire has been discussed in detail. The researcher's experiences during the process of data collection and conducting the treatment are discussed. Mention of the method of analysis to study.