CHAPTER III:

RESEARCH METHODOLOGY

Research methodology is a way to systematically solve a research problem. It refers not only to the methods used for conducting research but also the logic behind them. It helps the researcher explain why a particular method or technique has been chosen, ensuring that the findings are capable of being evaluated objectively. This chapter presents the methods and processes adopted to conduct the present study, which compares two teacher education programmes, the Integrated Teacher Education Programme (ITEP) and the traditional four-year integrated B.A. B.Ed./B.Sc. B.Ed. both of which are based solely on curriculum structure and content, as perceived by enrolled students. The objective is to understand how these courses differ in terms of what they offer to students, reflected through their perceptions and experiences.

3.1 Research Design

A research design is the plan or blueprint for the collection, measurement, and analysis of data. It represents the conceptual structure within which research is conducted and ensures that procedures are efficient, objective, and economical. The present study adopted a descriptive research design, as it aimed to describe the perceptions and feedback of students without manipulating any variables, focusing on curriculum-specific insights within existing program structures.

3.2 Research Method

Research methods refer to all techniques used by a researcher during the course of studying a research problem. They are concerned with data collection, establishing relationships among variables, and evaluating the accuracy of findings. This study employed the survey method as it is well-suited for descriptive research and effective in gathering a broad range of student perceptions. A structured questionnaire was used to collect the required information from students in both ITEP and traditional programmes.

3.3 Population

In research, the term population refers to the total group of individuals about whom information is desired. It includes all the units possessing certain defined characteristics relevant to the study. For this research, the population comprised all students enrolled in the ITEP and the traditional B.A. B.Ed./B.Sc. B.Ed. programmes at the Regional Institute of Education (RIE), Bhopal.

3.4 Sample

A sample is a subset of the population selected to participate in the study. It should be representative and free from bias to ensure valid conclusions. In this study, a total of 100 students were selected, representing both programmes and different years of study, to ensure diversity and balance in perspectives.

3.5 Sampling Technique

Sampling is the process of selecting a portion of the population to draw inferences about the whole. Simple random sampling, used here, ensures that every individual has an equal chance of being selected, which enhances the representativeness and reliability of the sample.

3.6 Tools

The main tool used was a structured perception scale-based questionnaire consisting of 20 Likert-scale items and two open-ended questions. These items focused on themes such as curriculum structure, relevance, integration of theory and practice, experiential learning, leadership development, Indian Knowledge Systems (IKS), digital preparedness, alignment with NEP 2020, and future readiness. The structured design ensured focused data collection aligned with the objectives of the study.

3.7 Data Collection Procedure

After selecting the sample through simple random sampling, data collection was carried out using a structured questionnaire designed in Google Forms. The link to the form was shared with the selected students through official academic channels, including email and class coordinators. Clear instructions were provided regarding the purpose of the study, ensuring informed consent and voluntary participation. Students were assured of confidentiality and anonymity to encourage honest responses. The form remained accessible for a fixed period during which responses were submitted. Once the data collection window closed, responses were securely downloaded in spreadsheet format and prepared for analysis.

3.8 Statistical Techniques

For data analysis, descriptive statistical techniques such as percentage analysis and graphical representation (bar graphs) were used. To compare student responses from the two

programmes, the independent t-test was applied, which allowed for assessing the significance of differences in perceptions between ITEP and traditional course students.