#### CHAPTER THREE

#### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter details the methodological framework utilized to investigate the impact of social media on the use of abbreviations and its effect on the writing skills of students at Kwara State Polytechnic, Ilorin. The chapter covers the research design, population, sample size, sampling techniques, data collection instruments, and data analysis methods. The adoption of a descriptive survey design facilitates a comprehensive understanding of the research problem, offering both quantitative and qualitative insights. This systematic approach ensures that the research objectives and questions are addressed rigorously, providing reliable and valid findings to inform educational and policy-related recommendations.

### 3.2 Research Design

The study will employ a descriptive survey research design, which is suitable for analyzing current phenomena, particularly the influence of social media on students' writing skills. A descriptive survey design allows for systematic data collection and analysis to describe and interpret the relationship between variables. According to Creswell (2019), descriptive research is ideal for exploring the characteristics of a specific population, making it applicable to this study.

This design focuses on examining the extent to which students' exposure to social media platforms contributes to their use of abbreviations in formal and informal writing contexts. Through structured questionnaires, quantitative data on frequency, types, and contexts of abbreviation usage will be gathered. Qualitative data, collected through open-ended questions, will complement the quantitative findings by capturing individual experiences and perceptions related to social media's influence on writing skills.

The descriptive survey is advantageous because it is cost-effective, time-efficient, and capable of handling large datasets. Moreover, it enables the researcher to identify patterns and relationships between social media usage and its impact on academic writing without manipulating variables. This non-experimental approach ensures the validity of the findings, as they reflect real-world scenarios.

The decision to integrate both quantitative and qualitative data further strengthens the reliability of the study. While quantitative analysis provides measurable trends and patterns, qualitative insights offer depth and contextual understanding, bridging gaps in numerical data. Ultimately, the descriptive survey design aligns with the study's objectives of investigating and analyzing the nuanced effects of social media on writing skills among students of Kwara State Polytechnic.

### 3.3 Population of the Study

The population for this research will include all students enrolled at Kwara State Polytechnic, Ilorin, across both National Diploma (ND) and Higher National Diploma (HND) programs during the 2023/2024 academic session. The institution comprises diverse departments such as Engineering, Science and Laboratory Technology, Business and Management Studies,

Environmental Studies, and Communication and Information Technology. This diversity ensures that the research captures a wide range of perspectives on social media usage and its effects on writing.

The total student population is estimated to be a large number of students, including those in full-time, part-time, and weekend programs. This large population will ensure the generalizability of findings to other similar academic settings. Students will be targeted because they are active users of social media platforms such as WhatsApp, Twitter, Instagram, and TikTok, which are known to influence communication styles.

This population will be highly relevant to the research as it will represent varying degrees of academic writing exposure and social media usage, providing insights into how different levels of digital engagement impact writing skills. Additionally, students' writing submissions, ranging from essays to research projects, will offer a basis for evaluating the practical implications of social media on academic writing.

The choice of Kwara State Polytechnic as the research setting will be significant, as it will reflect the broader linguistic and technological trends in tertiary institutions across Nigeria. This relevance will underline the importance of addressing the identified problem at both local and national levels, making the findings applicable for educational reforms.

# 3.4 Sample and Sampling Techniques

A representative sample of 100 students was selected from the total population using a stratified random sampling technique. Stratified sampling ensures that each faculty and department within Kwara State Polytechnic is adequately represented, reflecting the diversity in academic disciplines and social media usage patterns. According to Etikan and Bala (2017), stratified sampling enhances the reliability of data by ensuring proportional representation across key demographic and academic groups.

The sample was divided into strata based on faculty, level of study (ND or HND), and gender. From each stratum, participants were randomly selected to eliminate bias. This approach was chosen to capture varying levels of social media exposure and academic writing experiences across the student population. The final sample size of 100 was determined using Krejcie and Morgan's (1970) table for sample size determination. This sample size is adequate to yield statistically significant results while remaining manageable for data collection and analysis. By ensuring representation from all faculties and departments, the findings are expected to be robust and reflective of the larger student body.

### 3.5 Data Collection Instruments

The primary data collection instrument for this study will be a structured questionnaire designed to elicit both quantitative and qualitative information. The questionnaire is divided into three sections:

Section A: Demographic information, including age, gender, faculty, and level of study.

Section B: Social media usage patterns, focusing on platforms, frequency, and purpose of use.

Section C: Academic writing practices, with specific attention to the use of abbreviations, grammar, and spelling accuracy.

The questionnaire will include both closed-ended questions for quantitative analysis and open-ended questions to capture qualitative insights. The combination of these question types provides a comprehensive understanding of the research problem, bridging the gap between numerical trends and personal experiences.

## 3.6 Validity and Reliability of Instruments

The instrument to be used in the study will be shown to an expert(supervisor) to examine whether the questions were clear and whether such questions were sufficient to provide answers to the research questions.

The assessment and comments of the expert will be used to standardize the questionnaire before being administered to the respondents.

## 3.7 Method of Data Analysis

Data collected through the questionnaires will be analyzed using both quantitative and qualitative methods. Quantitative data will be entered into SPSS (Statistical Package for Social Sciences) for descriptive and inferential statistical analysis. Descriptive statistics, including mean, frequency, and percentage distribution, will provide an overview of social media usage patterns and writing skill trends. Inferential statistics, such as correlation and regression analysis, will test the relationship between social media usage and writing proficiency.

Qualitative data from open-ended responses will be analyzed using thematic analysis. This involves identifying recurring themes, such as students' perceptions of social media's impact on their writing. This dual approach ensures a balanced analysis, combining numerical evidence with contextual depth.