**CHAPTER ONE**

**INTRODUCTION**

* 1. **Introduction**

Distance learning is a way for students to access and learn at a university of their choice, either in person or remotely. It can include a mix of face-to-face instruction, online courses, and learning with print and computer-based materials. This means that many students will be e-learners for at least part of their education, using resources such as e-mail, online materials, and computer-based training and instruction. This chapter will provide an overview of the background and purpose of the study, including the problems being addressed, the aims and objectives, the significance of the study, the scope of work, and any limitations. It will also define any technical terms used in the study.

**1.2 Background of Study**

Distance learning is a way of delivering education remotely, which allows students to learn at their own pace and in their own environment, without the constraints of a traditional classroom setting. It involves the separation of teacher and learner in terms of location, with students having more control over their learning and communicating with their instructors through various forms of technology such as email, video conferencing, and online discussion forums. There are two main types of distance learning systems: online and offline. Online distance learning, also known as a virtual classroom, is a type of learning system in which students work independently and communicate with their teachers and other students online. Offline distance learning, on the other hand, is a multi-campus system in which a university or polytechnic establishes multiple campuses that may be centrally controlled or decentralized.

Education is a process that promotes lasting changes in behavior and helps to preserve, maintain, and improve cultural values, standards, and knowledge. In developing countries, education plays a vital role in promoting innovation and passing on current understanding to future generations. It serves as a platform for introducing people to various organizations, providing skills for daily tasks, leisure, and teaching sound ethics for the benefit of individuals and society. Overall, education is a platform for younger generations to understand their cultural heritage and actively contribute to the development and advancement of society. Historically, education has been delivered in physical classrooms with standardized and regulated classes of students and teachers.

This traditional method of education has consequences for both teachers and students. For example, education is typically only available to those who can physically be in a classroom and follow the instructor at a specific pace. However, the rapid population growth around the world and various educational systems in different regions have presented challenges to this method of education. There is a lack of sufficient human and material resources to meet the needs of the growing population.

Due to the increasing number of school-aged residents in many areas, only a small percentage can be admitted to traditional classrooms. This has led to a high student-teacher and student-classroom ratio, which can be less effective for teaching and learning. As a result, the field of education has become an attractive area for the application of computing systems, particularly since the late 1960s when computers were first introduced into classrooms. Information technologies such as computer-aided instruction, computer-aided learning, research packages, project monitoring, and computerized libraries have been used in education. With the advancements in multimedia technology, computer networks, and the internet, computers are now being used in distance learning through online and real-time teaching and instruction.

**1.3 Statement of the Problem**

Students often face difficulties in obtaining necessary education at their desired institution, even when resources are available. This can lead to problems such as students not attending school at all. It is also not practical for students in one country (e.g. America) to travel to another country (Nigeria) for lectures or for staff to travel to students in other countries. When the number of students increases, admissions may be reduced to ensure there are sufficient facilities for lectures. These issues motivated the research in order to find solutions.

**1.4 Aim and Objectives of Study**

The aim of the study is to develop a Web Base System for Distance Learning using FEDERAL POLYTECHNIC EDE as a case study. In achieving this aim, the following specific objectives were laid out as follows to design an application that will:

1. Provide course material on time and with different media types (audio, text and video).
2. Provide chat room, online exams, upcoming events and grade report.
3. Provide students easier way to acquire any of the NOUN certificates without been in the institute or with less difficulty.
4. Proffer solution to students whom because of nearness to institute and are unable to acquire knowledge that they need.

**1.5 Significance of Study**

Individuals and organizations alike can gain from distance learning. enhanced efficiency: It increases students' productivity because it is interactive.

1. **Improves Standard of Education:** it eliminates examination inadequacies like examination malpractices.
2. **Increased Access:** It enables people from any part of the world to be educated.
3. **Convenience and Flexibility to Learners:** learning process is structured in units; this makes the learner study at his own convenience without getting too bored with lectures.
4. **Reduced cost:** it reduces the cost of learning, examination and result processing institutions.

This study can be used by non-researchers to enhance their research and will be extremely beneficial to researchers who intend to learn more about it. This study adds to our understanding and could serve as a model for future research.

**1.6 Scope of Study**

The scope of this study's focus is on developing and implementing a web-based system for distance learning that makes use of cutting-edge technology to improve the quality of education at The Federal Polytechnic Ede.

**1.7 Limitations of the study**

During the course of this study, many things militated against its completion, some of which are:

1. **Time Constraint:** The time frame given to accomplish this project was very short due to school academic calendar and it was carried out under pressure which made the researcher not to implement some necessary features.
2. **Research material:** availability of research material is a major setback to the scope of the study.
3. **Frequent power failure:** This made the researcher append more money on fuel to ensure sustainable power.
4. **Financial Constraint:** Insufficient fund tends to impede the efficiency of the researcher in sourcing for the relevant materials, literature or information and in the process of data collection (internet).

**1.8 Definition of Terms**

**Computer:** an electronic device that is capable of accepting data, processing data automatically, store it, produces the result where needed.

**Distance Learning:** is an act of using IT tools to distribute or share knowledge between groups of learners. It is not going to be physically but the use of electronics.

**E–Learning:** it is an acronym of electronic learning it is an aspect of Distance Learning that is concerned with sharing of knowledge electronically by use of text video, web or any other IT tools.

**File:** This is a collection of related records.

**VEL:** This is the acronym of virtual electronic learning

**Program:** a set of logical instructions combined together to perform a specific task to a given problem and providing solution to it.

**IT Tools:** is any machines techniques etc. used in information technology.

**Output:** result of the processed data by the computer.

**Input:** data supplied to the computer for processing.

**IT (Information Technology):** It is combination of computing and telecommunication facility.

**Data:** raw materials used by the computer.

**Information:** processed data capable of solving a problem

**E-mail:** electronic mail, which is an alternative of HIPOST. This is the use of on - line computer to send messages across the net.

**Storage Devices:** a device for storing data in the computer

**Computer Network:** it is connection of two or more computers using special protocol such that they share data or information inform of text, audio, messages or mail.