**CHAPTER ONE**

**INTRODUCTION**

* 1. **Background of Study**

E-learning is a computer based educational tool or system that enables you to learn anywhere and at any time. Today e-learning is mostly delivered through the internet, although in the past it was delivered using a blend of computer-based methods like CD-ROM. When it comes to education, the model has been pretty straight forward - up until the early ‘00s education was in a classroom of students with a teacher who led the process. Physical presence was a no-brainer, and any other type of learning was questionable at best. Then the computer evolution happened and it radically changed the learning landscape.

Technology has advanced so much that the geographical gap is bridged with the use of tools that make you feel as if you are inside the classroom. E-learning offers the ability to share material in all kinds of formats such as videos, slideshows, word documents and PDFs. Conducting webinars (live online classes) and communicating with professors via chat and message forums is also an option available to users. Some of the most important developments in education have happened since the launch of the internet. These days learners are well versed in the use of smartphones, text messaging and using the internet so participating in and running an online course has become a simple affair. Message boards, social media and various other means of online communication allow learners to keep in touch and discuss course related matters, whilst providing for a sense of community.

Many proponents of e-learning believe that students must be equipped with basic knowledge in technology, as well as use it as a medium to reach a particular goal and aim. In the 20th century, we have moved from the Industrial Age through the Information Age and now to the Knowledge Age. Knowledge and its efficient management constitute the key to success and survival for organizations in the highly dynamic and competitive world of today. Efficient acquisition, storage, transfer, retrieval, application, and visualization of knowledge often distinguish a successful person from others. The ability to obtain, assimilate, and apply the right knowledge effectively will become a key skill in the next century. The survival of every individual, nation and organization in the 21st century, will depend upon their capacity to learn and the application of what they learn to their daily lives. E-learning has the potential to transform how and when students learn. Learning will become more integrated with the lifestyle of students and will use shorter, more modular and just-in-time delivery systems. By leveraging handy technologies, e-learning is bridging the gap between learning and work. Students can integrate learning into work more effectively because they use the same tools and technology for learning as they use for other purposes. Both students and Teachers recognize that e-learning will diminish the distinction of a library from every other place.

Overall, traditional learning is expensive, takes a long time and the results can vary. E-learning offers an alternative that is faster, cheaper and potentially better.

* 1. **Statement of Problem**

**The Existing System**

The current situation is very limited to few learning resources, students are unable to get knowledge more than what the lecture provides to them. This in the end limits student’s performances, because everything a student gets is collected from lectures in class

Here are some of the problems of the current system:

* In the existing system, Tutors must complete all course expectation within the allotted time. Which might not be enough for students to understand the teaching.
* Students spend a lot of money on buying study materials and extra classes like tuitions.
* Students find it difficult to retrieve mismanaged learning resources.
* The present method of learning is too individualistic, in the sense that students only see the things in a unilateral manner because of less reference materials.

**The Proposed System**

This system will hopefully serve as a centralized database of syllabus for the courses offered at the college allowing students and departments (current, past and prospective), to view them. The system will end up bringing an effective communication among students, lecturers, and the administration, by accessing information and other resources anytime, anywhere.

Here are some expected results of this project:

* This System will provide student the opportunity to take lectures more than once, which is required at the time of revision when preparing for the exam.
* This system will enable lecturers to get a higher degree of coverage to communicate the message in a consistent way for their student
* E-learning facilitates learning without having to organize when and where lectures can be held.
* E-learning allows students’ access to materials at less or zero cost.
* This proposed system will serve as a storage for learning materials, where learners can access and retrieve learning materials without having to re-purchase mismanaged ones.
* Generally, most learners are not used to the modern day technology but with e-learning they get eased into the system and also learn how to use the internet for other good purposes asides academics.
  1. **Aim and Objectives**

**Aim**

The aim of this project is to develop a Learning management system for the Federal College of Animal health and Production Technology.

**Objectives**

1. Virtual classroom Interface.
2. Content Delivery System.
3. Progress Tracking System.
4. Course Bookmark Functionality.
5. Data Storage.
6. E-library.
7. Students’ Information Management System.
   1. **Significance of Study**

**Benefits of E-learning**

1. Online Learning Accommodates Everyone’s Needs.
2. Lectures can be revisited any number of times.
3. E-learning gives student the opportunity to learn on-the-go.
4. Online learning is more adaptable to students’ way of life.
5. E-learning makes the personalized learning experience a priority, by giving students the opportunity to have a multilateral opinion in what they are to learn, how and when.
6. E-learning gives quick delivery of learning.
7. E-learning reduces the cost of learning.

**Beneficiaries of E-learning**

1. **Students:** With online learning students can access contents anywhere and anytime without having to take time out of other activities to learn or having to carry bulky textbooks around all the time.
2. **Lecturers/Instructors:** The nature of coming to class to dictate lecture notes first and then explain will be scratched out of the system because with e-learning in the mix students already have access to their notes. All the instructor needs to do is explain or shed more light on what the student must have learnt on the learning portal. This will also prevent fatigue from settling in quickly in lecture sessions.
3. **The Administration:** The portal will also serve as an Information storage holding the necessary details of students instead of having to keep registers annually

**1.5 Scope of Study**

This project work will focus on designing Learning Management System with a user-friendly environment for students to navigate easily in search of learning materials. The system will also provide each user an overview of courses available and functionalities like ability for the user to bookmark courses and share courses with other course mates. Finally, the system will be able to observe each user’s activity on the portal to deduce the user’s progress in percentage which will be displayed in a circular progress bar.

This proposed system will allow collaborative work but it won’t be able to perform the video conferencing function.

* 1. **Definition of Terms**

**L.M.S:** This is an acronym for learning management system which is a software application for the administration, documentation, tracking, reporting, automation and delivery of educational courses, training programs, or learning and development programs.

**Learning Analytics:** This is the measurement, collection, analysis and reporting of data accumulated during an online learning activity.

**Application Programming Interface (API):** This is a computing that allows interaction in terms of sharing of data between two separate medium.

**Asynchronous Learning:** This is the ability for the learner to access and consume an online course at different times. This is a core concept in online learning and web based training and allows a course to be delivered at a pace that suits each individual learner.

**Blended Learning:** An educational syllabus that combines multiple media types with a combination of offline and online learning; often a blended classroom environment and e-learning.