 

**REQUIREMENTS DOCUMENT FOR THE DESIGN AND IMPLEMENTATION OF A VIRTUAL LEARNING ENVIRONMENT.**

**By Chesco-Tech**

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# VLE Overview

To develop a functional Virtual Learning Environment (VLE) with a wide range of integrated web based applications which will be accessible to Various Users.The VLE will enable users to access information, tools and resources to support quality educational delivery and decision making in leadership and management.

## Objectives

The Objective of this Assignment is to design and develop a Virtue Learning Environment for the ZOCS Members and its respective users.

# Functional Requirements

## Virtue Learning Environment

* Mobilize resources for the VLE including MoE pre-primary and primary education curriculum, supplementary reading materials, Transition Management Guide, national Curriculum Framework, national Educational Policy, [Education and Skills Sector Plan 2022 – 2026](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwiU6KO03PCDAxU3X0EAHY_GALIQFnoECBwQAQ&url=https%3A%2F%2Fplanipolis.iiep.unesco.org%2Fsites%2Fdefault%2Ffiles%2Fressources%2Fzambia_-_education-and-skills-sector-plan-2017-2021.pdf&usg=AOvVaw3hGjPq1CCo5w8FSJhFVnZX&opi=89978449) self-assessment quizzes, administrative information about various pre-primary and primary courses including prerequisites, registration requirements, etc;
* Create links to all pre-primary and primary distance learning programmes and their training institutions and examination boards;
* Create a dashboard that directs users to different pages
* Create a VLE that supports communication, including e-mail, threaded discussions, chat rooms, Twitter and other media, with an instructor or an assistant acting as moderator; additional elements include wikis, blogs, RSS and 3D virtual learning spaces
* Create a virtual resource room in which teachers and education leaders will interact and take responsibility for their own professional growth;
  + Provide for management of access rights for all users of the VLE;
  + Create necessary hyperlinks to all resources and virtual platforms provided for on the VLE;
  + Provide capacity building for ZOCS officers and MoE officials at district level in the project sites; and
  + Train ZOCS and MoE staff on management of the learning environment and updating system and uploading content.
  + Provide mentorship and coaching for the end users of the VLE and give whole rights to ZOCS to use the System after development.
  + Manage, track and report any changes made to the learning platform

# Detailed User requirements.

## Learners

* The VLE will allow Learners to Login onto the Platform
* The VLE will allow Learners to view Notifications on notice board
* The VLE will display available subjects
* The VLE will allow Learners to access Learning tools
* The VLE will allow Learners to have access to the Documents or Materials.
* The VLE will allow Learners to view assignments submitted by teacher.

## Parents

* The VLE will allow Parents to interact with Instructors / teacher over their Children’s education on the platform.
* The VLE will allow a parent to view learning materials and homework or assignments sent by a teacher.

## Teachers /Instructors

* The VLE will allow Logged in Teachers to view, Upload Document Materials, Quizzes, Assignments and Post Notification to the notice board.
* The VLE will allow Teachers to interact with their Colleagues via Chat Rooms
* The VLE will allow Teachers or Instructors to interact with Children’s Parents
* The VLE will allow Teachers to communicate professional concerns to the District Resource Centre.
* The VLE will provide links to universities. Links to registration for courses, more.

## The MOE HQ

* The Ministry of Education HQ will be able to upload Documents(pre-primary and primary education curriculum, supplementary reading materials, Transition Management Guide, national Curriculum Framework, national Educational Policy, [Education and Skills Sector Plan 2022 – 2026](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwiU6KO03PCDAxU3X0EAHY_GALIQFnoECBwQAQ&url=https%3A%2F%2Fplanipolis.iiep.unesco.org%2Fsites%2Fdefault%2Ffiles%2Fressources%2Fzambia_-_education-and-skills-sector-plan-2017-2021.pdf&usg=AOvVaw3hGjPq1CCo5w8FSJhFVnZX&opi=89978449) self-assessment quizzes, administrative information about various pre-primary and primary courses including prerequisites, registration requirements) and Post Notifications on the Notice Board for teachers and instructors to review, and oversee the quality of education that is been shared.
* Review and Comment on concerns from provinces.
* Create a teacher and assign the teacher to a school.

## ZOCS

* Upload information on the system, documents, notices, more.
* Confirm Documentation
* Assign Permission Rights to users
* View Reports on concerns, activities.

## Universities

* The VLE will allow authorized Universities to conduct prerecorded lessons on the platform.
* The VLE will allow authorized Universities to share learning material and any other documents relevant to teachers.

## System Administrator

* The VLE will allow Admins to add schools and their Locations.
* The VLE will allow Admins to assign Permission rights to users.
* The VLE will allow Admins to send Notifications on the Notice Board
* The VLE will allow Admins to manage user Accounts

## District Resource Center

* Interact with School Management privately
* Create a teacher and assign the teacher to a school.

# INFORMATION FLOW

MOE HQ / ECE DIRECTORIES

KABWE

PEO / PRC

CHOMA

DEBS / DRC

UNIVERSITIES

SCHOOL

PARENTS

LEARNERS

# Non Functional Requirements

## Usability

The system should have a simple user interface that follows for ease of data entry. The system should be parameter and configuration driven.

## Security

The system shall be designed with a level of security appropriate for the sensitivity of information enclosed in the database. The application will need to be programmed with best practices to avoid SQL injection attacks and other internet hacking and attacks that can take place, a possible penetration testing would be a good idea.

## Performance

The System is expected to be of best performance with loading time for all pages and requests this can be achieved with good programming practice.

## Extensibility

The System will be expected to be built in a way that it can be easily extended and easy to integrate to other systems.

**Requirements Sign off Chesco-Tech:** 

**Date: 25 January 2024.**

**Requirements sign off ZOCS:**

**Date:**