



**PLP ACADEMY**

**END OF COUSE PROJECT:**

**MWALIMU CENTRAL**

**WARIGIA MILKA MACHARIA**

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# 1 Introduction

## 1.1 Background

Teacher, schoolteacher, educator, is said to be that one who helps learners acquire knowledge, skills, competencies, virtues, values. Teaching is a career and also a role played by almost everyone. A parent for example, is their child's first teacher.

Technically speaking, the primary role of a teacher is to deliver classroom instruction i.e., lessons that help learners learn. This includes instruction in literacy, numeracy, craftsmanship, vocational training, the arts, religion, civics, life skills, sciences, community roles and more.

However, in the real sense, classroom instruction is only part of their role. Teachers are also surrogate parents, mentors, counsellors, disciplinarians, indeed there is not task related to life that is beyond a teacher.

Being that the primary role of a teacher is to deliver classroom instruction, they therefore need to prepare and deliver effective lessons, offer feedback, assess the learners, manage classroom materials, productively navigate the curriculum and collaborate with other staff and not just the teachers.

As our world changes especially with all the technological advancements, education cannot be left behind. The ways we communicate, collaborate, learn and teach have all changed and we have to take cognisance of this. We are now 21<sup>st</sup> Century teachers.

The 21<sup>st</sup> Century skills can be summed up as

Learning Skills – teaches students about the mental processes required to adapt and improve upon modern work environment. These are the 4Cs being critical thinking, creativity, collaboration and communication.

Literacy Skills – these skills focus on how students can discern facts, publishing outlets and the technology behind them. There is a strong focus on determining trustworthy sources and factual

information to separate it from the misinformation that floods the internet. The skills include information literacy, media literacy and technology literacy.

Life Skills – the intangible elements of a student’s everyday life. These intangibles focus on both personal and professional qualities. They include flexibility, leadership, initiative, productivity and social skills.

## 2 Problem Statement

With the foregoing, it can be said that teaching is the organising of learning thus the problem of successful teaching is to organise learning for authentic results. Teaching involves:

- i) Learners
- ii) Facilities, stated place and time for meeting, learning resources
- iii) Orderly and understood procedures for presenting, discussing and evaluating content
- iv) A grading system for both the teacher and learner to assess how the learning is coming along
- v) Organisation that helps to bring all the relevant parts together to form the whole

A good teacher as organiser helps the learners discover, formulate and clarify their own purposes through the learning process. As a good organiser, the teacher builds on strengths rather than emphasise on weaknesses. As a leader, the teacher must often take it upon themselves to reveal to the learners where they have succeeded and where they have not. In this, a teacher must develop the ability to hold a mirror to the group so they can see and judge their own accomplishments and failures and walk with them as they resolve their failures. A good teacher maintains control and models this to the learners.

It is therefore important to note that if a teacher is not organised, they will not be able to guide the learners forward. This organisation boils down to do I have the correct lesson plan? Have I presented it in such a way that my learners will understand what I am teaching? Do I have all the resources need for the lesson?

This is where we struggle as teachers. Our organisation can be wanting and especially because our resources and reporting structures varied and scattered.

It is important to note that we have many learning management systems in the market. The dilemma is that they are not readily customisable to the demands of the Competence Based Curriculum in Kenya. Again, majority of the LMS have options for students and school administrators. The part for teachers is generally related to keeping of academic records.

### 3 Proposed Solution

With the advent of the 21<sup>st</sup> Century, the demands on the teacher increases. They have to understand what is going on around them and how what affects the learners. With better organisation, a teacher is able to a lot more research and make their lessons more relevant. This necessitates a better structure where they can organise their work.

The proposed solution is a portal where the teachers will be able to access their teaching and learning materials at the click on a button, by use of SQL queries. This will include access to all the professional documents for example the curriculum designs, lesson plan templates, schemes of work, record of work, student assessment records and resources used in the different learning areas.

### 4 Project Objective

The objective of this project is to help eliminate waste of time and help the teachers plan better and in advance for their lesson delivery. This will in effect improve on their output and quality of work and the services they offer including to the parents.

### 5 Project Scope

Owing to the magnitude of this project, it will be carried out in 3 phases:

#### 5.1 Phase One: Demo Stage

During this phase, a demo comprising of information for at least the two Pre-Primary classes will be built. This will include input of the curriculum designs into an SQL database, building of a website where teachers will be able to log in to access their professional documents being scheme of work, lesson plans, assessment rubrics, and record of work templates for review and use.

This phase will be complete by 30<sup>th</sup> September 2022 and will form part of the PLP Course Project.

## 5.2 Phase Two: Expansion Stage

In this phase, all the classes from PP1 to Grade 7 will be populated with data and the professional documents generated. This will include designing a way in which teachers will be able to use the website to generate SQL queries and download the information in formats they can be able to download and manipulate. This phase is expected to be complete by 30<sup>th</sup> November 2022.

## 5.3 Phase Three: Implementation and Pilot Stage

It is hoped that the system will be ready for testing to a wider community. This phase is expected to run for at least one year. The feedback gained will allow for making of improvements on the system in readiness for the major launch in October 2023.

Notes:

It is hoped that before January 2024, the system will be available for free and after which a subscription system will have been put in place. This is to allow the system to be self-sustaining.

# 6 Project Justification

The need to improve on our planning and organisation as teachers cannot be underestimated. For us and our learners to gain the benefits of the 21<sup>st</sup> Century, we need to become more organised and begin to take advantage of the resources around us and better still to customise them to suit our needs. This is what programming can do for us.

## 6.1 System Justification

This demo project will primarily be built on SQL, PHP, HTML and CSS. As the project is built, other relevant programs will be incorporated. It is envisioned that every teacher will have their own portal where they will save their work and edit and share at will.