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Moodle for Professional Development to Agricultural Extension Professionals in Africa: Workshop

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Who we are?

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Agenda

 Design and evaluation of course and curriculum for professional development

Digital Libraries for Professional Development

Learning Management System

Education and Knowledge Diffusion

- Education is one of the key factors to effective knowledge diffusion
- In agriculture, extension agents/workers play a key role in the diffusion of agricultural knowledge
- Continuous professional development and training of extension agents/workers enables them to be effective in the diffusion of that knowledge

Education/Training of Extension Agents

- Professional development and training of extension agents/workers require a well planned curriculum and a set of courses
- Courses are delivered through face to face and online modes as well as a mix of both
- Each has its own advantages and challenges
- Online: practical, convenient, flexible, anytime, anywhere, more time to digest course content – impersonal, timeconsuming, lack of support

Curriculum - Defined

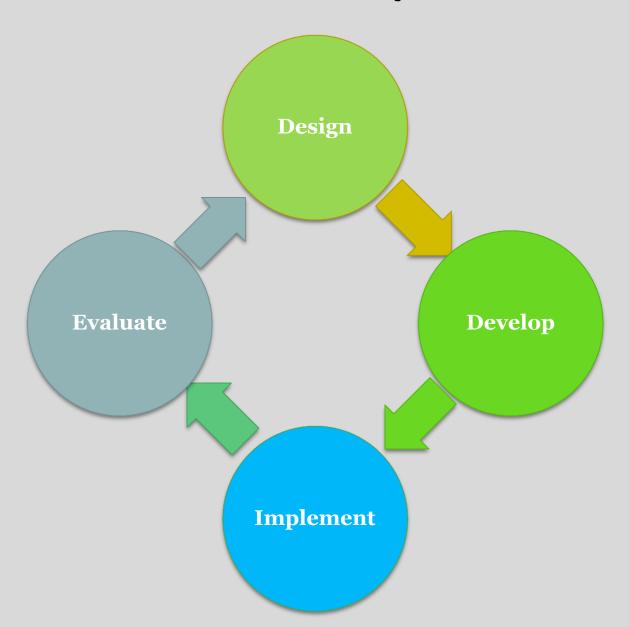
- A curriculum:
- is a document or plan that exists in a school or instructional setting
- defines the work of instructors or trainers or teachers
- identifies the content to be delivered to students using a set of instructional methods, and
- its main purpose is to achieve student learning goals and objectives

Needs of students

The content

Instructional methods

The Curriculum Development Process



Curriculum Evaluation

- "If a student hasn't learned, the instructor hasn't taught"
- Evaluation of the achievement of specified curriculum or course or student learning goals and objectives

Assignments **Demonstrations Projects** Essays **Portfolios** Tests/Exams

BLOOMS TAXONOMY

EVALUATION

Assessing theories; Comparison of ideas; Evaluating outcomes; Solving; Judging; Recommending; Rating

Using old concepts to create new ideas; Design and Invention; Composing; Imagining; Inferring; Modifying; Predicting; Combining

SYNTHESIS

ANALYSIS

Identifying and analyzing patterns; Organisation of ideas; recognizing trends

Using and applying knowledge; Using problem solving methods; Manipulating; Designing; Experimenting

APPLICATION

COMPREHENSION

Understanding; Translating; Summarising; Demonstrating; Discussing

Recall of information; Discovery; Observation; Listing; Locating; Naming

KNOWLEDGE

Student Learning Objectives

- State the skills, knowledge, values, attitudes, and dispositions that students will be equipped with
- Can fall within one or more levels in Blooms Taxonomy
- Student Learning Objectives Action
 Verb List

Student Learning Objectives

- At the end of the workshop, participants should be able to:
 - distinguish the various modules and features of Moodle
 - use the various features of Moodle
 - design or create a course in Moodle
 - appraise the appropriateness of Moodle to their situations/environments/needs

Digital Libraries for Professional Development

We live in a time of abundance

 There is so much online, digital research based knowledge stored in repositories allover the world

 We can harness these resources for professional development to support Agricultural Extension Agents in Africa.

Digital Libraries ...

- Examples
- AGORA



CGIAR Library



Digital Libraries ...

• AGRICOLA – USDA National Agricultural Library.

USDA United States Department of Agriculture National Agricultural Library

 Or, a more comprehensive list of resources from FAO Library – next slide.



Name	Description
AGRICOLA	More than 3.7 million citations to agricultural literature compiled by the National Agricultural Library, USDA. Subjects [more] non-FAO staff access
<u>AGRIS</u>	More than 3 million citations to world-wide literature on all aspects of agriculture. Includes geography, history, legislation, [more] non-FAO staff access
AiDA - Accessible Information on Development Activities	Full text access to historical and current information on almost 500,000 activities of major international development [more]
Bibliothèque pour le Développement	600 Full text publications in French, in the fields of agriculture, construction, cooperation, economics, education, [more]
CAB Abstracts	International bibliographical database with broad coverage of major scientific literature in all aspects of agriculture, [more]
CAB Abstracts Archive	The Archive brings together research from 17 printed abstract journals produced between 1910 and 1971 (the equivalent of 600 [more] Note: See also Virtual Library (FAO Intranet). 3 simultaneous users.
CAB Ebooks	CAB eBooks provides a unique opportunity to access CABI's prestigious titles in an easy-to-use format. Books are indexed and [more]
CRIS - Current Research Information System	Full text access to USDA documentation and reporting system for ongoing and recently completed research projects in [more]
Directory of Open Access Journals	Access to more than 1200 free, full text, quality controlled scientific and scholarly journals that include almost 60,000 [more]
East African Development Library	Contains 592 full text publications from or about East Africa, giving a wide range of development information for [more]
<u>EconPapers</u>	Full text access to research papers in economics, the world's largest collection of on-line economics working papers, [more]
EUR Lex	Full text access to the portal to European Union law - covers the Official Journal, treaties, case law and legislation of [more]
FAO Databases and Information systems	List of over 50 alphabetically-listed entries and links to FAO databases. [more]
FAO Library Online Catalogue	FAO Documentation and library collections. Includes coverage of Agriculture, Food and Nutrition, Rural Development, Plant [more]
FAO statistical databases	Links to AQUASTAT, FAOSTAT (on-line multilingual database currently containing over 1 million time-series records from over 210 [more]
<u>Horizon et pleins-textes</u>	Scientific output of the "Institut de recherche pour le developpment" (IRD). Over 32,500 full text access to documents - [more]
<u>Plant Management Network</u>	The Plant Management Network offers an online suite of applied science information, including peer-reviewed journals, field [more]
<u>SwetsWise</u>	Online access to full text articles and table of contents service (TOC). Covers a range of about 100 full text and 3.000 [more]
Tropical Agriculture & Rural Development	Over 100,000 citations on tropical and subtropical agriculture and rural development. Contains citations, with abstracts, to [more]
World Development Indicators	575 series for 226 countries and regional groupings. WDI is an enlarged version of the statistical appendix to the World [more]
World Development Sources	Full text access to reports of World Bank-funded projects, in addition to economic and sector papers that provide the [more]

Learning Management System

- LMS is the framework that handles all aspects of the learning process.
- An LMS is the infrastructure that delivers and manages instructional content, identifies and assesses individual and organizational learning or training goals, tracks the progress towards meeting those goals, and collects and presents data for supervising the learning process of an organization as a whole.

Watson, W.R., & Watson, S.L. (2007). An argument for clarity: What are Learning management systems, what are they not, and what should they become? *TechTrends*, *51*(2) 28 – 34.

LMS ...



https://moodle.org/



https://www.coursesites.com





http://www.sakaiproject.org/

Moodle

- Download, Install, Configure Moodle
- Create a new course
- Working with images, videos
- Using repositories
- Creating Forums, Wiki

Download, Install, Configure Moodle

- Before you install Moodle, you need the AMP stack
 - Web server Apache
 - Database MySQL
 - Scripting language PHP
- To get the stack, there are multiple options







Download ...

- But ...
- Complete install packages V. Standard Install packages

- Complete install packages has Moodle plus AMP stack
- Standard Install packages has only Moodle.

Download...

- So, better go with the Complete install packages if using
 - Standalone computer, or
 - On a development/test environment, NOT on a production server

Ready to install



Let's do hands-on

- Configuring Moodle
- Create a new course
- Working with images, videos
- Using repositories
- Creating Forums, Wiki

Hands-on ...

Our Demo Moodle site

