



PROJECT REPORT FOR

CAPACITY BUILDING TRAINING ON E-LEARNING CONTENT DEVELOPMENT

Project Report





TABLE OF CONTENTS

| COP | YRIGHTS AND DISCLAIMER | 2 |
|-------|---|----|
| DEF | INITION AND DOCUMENT INFORMATION | 3 |
| FOR | EWORD | 4 |
| LIST | OF FIGURES | 6 |
| LIST | OF TABLES | 6 |
| АСК | NOWLEDGEMENT | 7 |
| ACR | ONYMS, ABBREVIATIONS GLOSSARY OF TERMS | 8 |
| 1. IN | ITRODUCTION AND BACKGROUND | 9 |
| 1.1 | Assignment Introduction and Background | 9 |
| 1.2 | Content development definition | 9 |
| 1.3 | Objective, Tasks, Scope and Deliverables | 9 |
| 1. | 3.1 Overall Objective of the Assignment | |
| 1. | 3.2 Tasks/Activities performed | |
| 1. | 3.3 Deliverables and timeframe for submission | |
| 1.4 | Report organisation | |
| 2.0 A | ASSIGNMENT METHODOLOGY | |
| 2.1 | Phase I: Inception Phase | |
| 2.2 | Phase II: Assignment Execution | |
| 2.3 | Phase III: Reporting | |
| 3.0 1 | FRAINING SESSIONS AND COURSE CONTENT | 14 |
| 4.0 ŀ | KEY HIGHLIGHTS OF PARTICIPANT EVALUATION | |
| 4.1 | Overall Assessment of the training | |
| 4.2 | Training Modules | |
| 4.3 | Relevancy of the training | |





LIST OF FIGURES

| Figure 1: Methodology of the assignment | 11 |
|--|----|
| Figure 2: Overall Assessment of the training | 18 |
| Figure 3: Relevance of the training | 20 |

LIST OF TABLES

| Table 1: Training programme | 17 |
|--|----|
| Table 2: Participants level of satisfaction with the different training sessions | 19 |





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ACRONYMS, ABBREVIATIONS GLOSSARY OF TERMS

| Term | Definition and Description |
|------------|--|
| RUFORUM | Regional Universities Forum for Capacity Building in Agriculture |
| ZOOM | Teleconferencing Tool |
| TOR | Terms of Reference |
| 8Tech | Eight Tech Consults Limited |
| Consultant | Eight Tech Consults Limited |
| Client | RUFORUM |
| ICT | Information Communication Technology |
| LMS | Learning Management System |
| 8learning | Eight Tech Learning Management System |





1. INTRODUCTION AND BACKGROUND

Eight tech consults Limited was contracted by RUFORUM to undertake the training **to build** capacity on online content development for RUFORUM Universities staff focusing on elearning pedagogy, content authoring and delivery. This report describes how the assignment was carried out and its impact to the participants.

1.1 Assignment Introduction and Background

The Regional Universities Forum for Capacity Building in Agriculture (RUFORUM), is a network of 163 universities in 40 African countries, is implementing Regional E-learning Platform (REP) to facilitate online learning across the RUFORUM Network with support from Arab Bank for Economic Development in Africa (BADEA). This initiative builds on previous efforts by RUFORUM to promote e-learning and use of digital technologies for research, teaching and learning in Africa. The REP initiative seeks to harness the pivotal role of digital technologies in improving online teaching and learning in African Universities. It focuses on the use of digital technologies for teaching and learning as well as sharing of experiences as an approach for improving educational outcomes and enhancing the quality of teaching and learning in participating universities. It also aims at promoting sharing of resources across the network and to link the network to similar initiatives globally. By doing so, beneficiary universities are able to train through innovative and creative technology-enabled techniques that deliver and enhance the learning experience.

1.2 Content development definition

From the ToR we understood that content development is researching, producing and publishing of information to meet a strategic goal. Content development is focused on digital literacy skills trainings in communities and institutions. We broadly do understand Content development as the process of originating (creating), editing, manipulating and maintaining the contents in order to provide knowledgeable fillings to the users.

1.3 Objective, Tasks, Scope and Deliverables

This section presents our understanding of the assignment, the assignment objectives, scope and the associated deliverables as extracted from the TOR's and our own experience performing similar assignments.





1.3.1 Overall Objective of the Assignment

The overall objective of the consultancy is;

"to build capacity on online content development for RUFORUM Universities staff focusing on e-learning pedagogy, content authoring and delivery"

1.3.2 Tasks/Activities performed

The following tasks or activities were undertaken as stipulated in the contract;

- a) Prepare Training materials based on the suggested course content
- b) Package courses content into a training programme to transfer the skills
- c) Deliver the training online
- d) Prepare and submit a written report of the training

1.3.3 Deliverables and timeframe for submission

According to our own consultancy experience in carrying out assignments of the same nature, the consultant is expected to produce the following deliverables as key outputs in successful delivery of this assignment: -

- a) An inception report with details of the training programme
- b) Training materials on the suggested courses within the e-learning system
- c) A 5-day training on e-learning pedagogy
- d) An end of Consultancy Training Report

NB: The consultant notes that these deliverables were explicitly stated in the contract between 8tech and RUFORUM and we can confirm that Eight Tech Consults has delivered all the deliverables (a, b, c) and this report is deliverable (d).

1.4 Report organisation

In section 2 highlights how the assignment was executed, section 3 presents the course module outline and training programme, section 4 presents the key highlight of the training, section 5 present our observations and conclusions and section 6 presents the list of the course participants.





2.0 ASSIGNMENT METHODOLOGY

The methodology for this assessment was structured into three main phases, namely:

- i) Preliminary phase
- ii) Execution phase
- iii) Reporting phase

The Figure 1 below summarizes the step-by-step phasing of the assignment

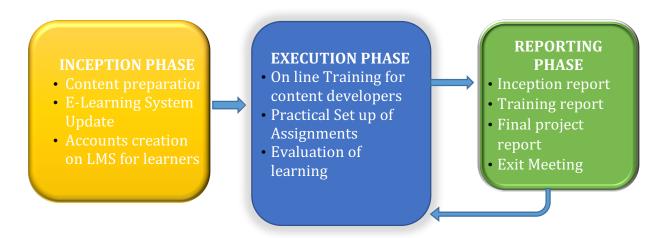


Figure 1: Methodology of the assignment

2.1 Phase I: Inception Phase

a) Entry meeting

Upon the receipt of the signed contract from RUFORUM, the consultant held preliminary entry meetings with the project team and other stake holders. The meeting further clarified on unclear issues pertaining to the assignment and enabled the consultant to have a relationship building with the staff that would be involved in the assignment. This is a critical activity for the success of the assignment.

b) Preliminary review of documents

After the entry meetings, background documents concerning the RUFORUM content development training were reviewed to get a better understanding of the context for operationalization of the project.





c) Trainee engagement

From the entry meetings and preliminary document reviews, key stakeholders were identified and the strategy of engaging them developed. A stakeholder matrix was used to map out the key stakeholders, their roles and nature of information needed from them as aligned to the objectives of the study. These stakeholders were engaged to seek their opinions of the capacity needs, ICT trends in the education among others.

d) Training programme to transfer the skills

In preparation for the training, the consultant developed a training program which acted as a guide for the trainers on how to conduct the training and also clearly showed the techniques that were deployed during the training.

2.2 Phase II: Assignment Execution

a) Draft Training materials

Upon completion of the inception activities, the consultant developed training materials to be used during the training. These were distributed via the e-learning platform that was used during the training.

b) Deliver Online training

In this part of the training, the consultant embarked on delivery of Key steps in training delivery to the trainees. The actual training was practical/ case study and exercise-oriented because of the necessary practice component required. Examples were demonstrated and practical sessions held to ensure each trainee has grasped the skill. The sessions were interactive and the facilitators frequently initiated discussion during the training sessions. Ideas were freely exchanged and participant specific issues addressed.

During the training, question and answer sessions were held throughout the entire 5 days. Staged evaluation and review exercises were undertaken to ascertain trainees' acquisition of skills. In order to offer a dedicated and spacious environment that encourages trainer demonstrations for ease of delivery and to ensure every student kept in step with the material, the E-learning environment was designed to aid the above factors.

Since the training had numerous participants from across the world, it was conducted as a five-day virtual/ online workshop through Zoom. The training had both theory and practical sessions that were undertaken in and outside of the training sessions. Majorly the participants were able to learn how to prepare for an online class using well known e-pedagogical aspects, use content authoring tools such as eXe and Hot Potatoes among others.





Being an online workshop, training and resource materials were prepared and shared with the participants via the Eight Learning Institute of Technology & Management learning system (https://elearning.8learning.org). The training programme clearly demonstrated what was taught within the 5 days. However below is the summary of what was provided within the training.

- i) Intensive hands on training in different aspects of e-learning including but not limited to: pedagogical perspectives of e-learning (how to facilitate learning in e-learning), econtent development, student centred learning, online video conferencing teaching etiquettes, student-teacher interaction, educational technology strategies, etc.
- ii) Participants were facilitated to plan, design and implement an e-learning course for an online classroom session
- iii) The participants were also given an opportunity to look at and evaluate existing elearning courses that they were familiar with or have interacted with before. Case studies were evaluated during the discussion of best practices.
- iv) The workshop had presentations, case studies and practical work for the participants.

2.3 Phase III: Reporting

a) Inception Report

From the preliminary works, a complete inception report will be developed. The report detailed, our understanding of the assignment from conceptual level to outcomes, presented a refined methodology and approach. The inception report also contained a 5-day program that was used for the training.

b) Final Training Report

Taking into account the results obtained from the stake holder engagement, data collection, Training and comments from the client, the consultant will provide a comprehensive report that clearly articulates all the project deliverables including pictures of activities and annexes **(this report)**.

c) Exit meeting

The consultant shall conduct an exit meeting to share key lessons and recommendations as per our work philosophy of professional consultancy advice. The meeting will be used to officially close the assignment.





3.0 TRAINING SESSIONS AND COURSE CONTENT

The training was conducted as **a five-day virtual/ online workshop through Zoom**. A major component of the training were the tasks to be undertaken in and outside of the training sessions by participants. Below is the training schedule that was used in the 5 days.

| Day | Training | Details/ Sub-Themes | Responsible Team and | | |
|-----|----------------------|--|---|--|--|
| | Session | | methodology | | |
| 1 | 11:00 - 11:30 | Opening Remarks | RUFORUM Secretariat | | |
| | 11:30 - 13:00 | Teaching and Learning with Technology Possibilities and Potential Issues (e.g. engagement & interaction) Online Learning Environments Learning Networks/ Communities Associated software tools Challenges Changed roles Teacher role; Learner role Class environment - themes and characteristics | Eight Tech Trainers - Presentation, Group activity on the pedagogical differences between traditional learning and e- learning | | |
| | 1 Hour Minutes Break | | | | |
| | 14:00-16:30 | First Steps to Effective E-Learning: The pedagogical perspectives of e-Learning Problems with course design Effective VLE course design Analysis | Eight Tech Trainers - Presentation, Group activity on the pedagogical differences between traditional learning and e- learning | | |





| | | • Evaluating an online course | | | |
|---|----------------------|--|------------------------------|--|--|
| | | development solution | | | |
| | | 3. Practical Session on the use of a | | | |
| | | Learning Management System | | | |
| | | (www.8learning.org) | | | |
| | | | | | |
| | 16:30 - | Participant exercise | Individual Practical | | |
| | 18:00 | Use Form One and Two | exercises | | |
| | | | | | |
| | 11:00 - | Effective E-Learning Content Design using | Eight Tech Trainers - | | |
| 2 | 13:00 | the Learning Object Concept | Presentation, Group activity | | |
| | | The need for e-content | on the pedagogical | | |
| | | The process of e-Content | differences between | | |
| | | Development | traditional learning and e- | | |
| | | e-Content rendering and | learning | | |
| | | structuring | | | |
| | | e-Content structuring – Detailed | | | |
| | | Table of Content | | | |
| | | • Story board/sitemap – | | | |
| | | presentation | | | |
| | | Setting Course Objectives | | | |
| | 1 Hour Minutes Break | | | | |
| | 14:00 - | Rapid E-content Development | Eight Tech Trainers - | | |
| | 16:30 | • EXE e-Learning Architecture (e- | Presentation, Group activity | | |
| | | Learning Objects and Guide to e- | on the pedagogical | | |
| | | Learning Content Development | differences between | | |
| | | using EXE | traditional learning and e- | | |
| | | Transforming EXE produced | learning | | |
| | | content into offline based materials | <u> </u> | | |
| | | on CDs | | | |
| | | | | | |
| | 16:30 - | Participant exercise | Individual Practical | | |
| | 18:00 | • Use EXE software to practice | exercises | | |
| | | | | | |
| | | | | | |
| 3 | 11:00 - | Rapid E-content Development | Eight Tech Trainers - | | |
| | 13:00 | • Introduction to Multimedia & | Presentation, Group activity | | |
| | | Principles of Visual Design | on the pedagogical | | |
| | | Infographics Design & | differences between | | |
| | | Simple graphics concepts | traditional learning and e- | | |
| | | (Adobe Illustrator) | learning | | |
| L | | (| | | |





| | | Video Production Tutorials production | | | | |
|---|--|--|---|--|--|--|
| | 1 Hour Minutes Break | | | | | |
| | 14:00-Rapid E-content Development16:30•Simple Animations Development-Whiteboard Videos (VideoScribe) | | Eight Tech Trainers - Presentation, Group activity on the pedagogical differences between traditional learning and e- learning | | | |
| | 16:30 – 18:00 | Participant exerciseUse Scribe Animation Software to practice | Individual Practical exercises | | | |
| | | | | | | |
| 4 | 11:00 - 13:00 | Online Learning Activities Online Collaborative Tools (Discussion Forums, Chatrooms etc.) Online Groups Online Books and Resources Using URLs as Referencing materials | Eight Tech Trainers - Presentation, Group activity on the pedagogical differences between traditional learning and e- learning | | | |
| | | 30 Minutes Break | <u> </u> | | | |
| | 14:00 - 16:30 | Introduction to Digital Assessment Creating Online Open Book Tests for the LMS Using Hot Potatoes tool Creating Interactive Online Tests The Hot Potato architecture MCQ Fill in Option Essay 1 Hour Minutes Break | Eight Tech Trainers - Presentation, Group activity on the pedagogical differences between traditional learning and e- learning | | | |
| | 16:30 - | Participant exercise | Individual Practical | | | |
| | 18:00 - | | exercises | | | |





| 5 | 11:00 - | Assessment | Eight Tech Trainers - | |
|---|---------|--------------------------------------|------------------------------|--|
| | 13:00 | Developing Course Content using | Presentation, Group activity | |
| | | EXE or VideoScribe Animation | on the pedagogical | |
| | | Software by each Trainee | differences between | |
| | | Developing an online Assessment | traditional learning and e- | |
| | | using the learnt skills | learning | |
| | | 1 Hour Minutes Break | | |
| | 14:00 - | Wrap up | Eight Tech Trainers - | |
| | 16:30 | • Assessment and presentation by | Presentation, Group activity | |
| | | each trainee on the developed | on the pedagogical | |
| | | course content | differences between | |
| | | • Training evaluation and reflection | traditional learning and e- | |
| | | | learning. | |
| | | | Evaluation tool available on | |
| | | | www.8learning.org | |

Table 1: Training programme

4.0 KEY HIGHLIGHTS OF PARTICIPANT EVALUATION

The participants were further engaged in an evaluation process that was focused on assessing 4core areas of the training; overall assessment of the training, training modules, facilitators, relevance of the training, their responses are highlighted below.

4.1 Overall Assessment of the training

In terms of the overall assessment, it was evident from the feedback that was being posted in the chatroom that majority of the participants rated the training as having been very good and several comments were given on the facilitators for the training which is worth concluding that the trainers were very knowledgeable to what they were doing. Below is the assessment given on other features;







Figure 2: Overall Assessment of the training

It is also worth noting that majority of the participants 92.9% indicated that they would recommend their respective institutions to organise this training at institutional level.

Some of the comments that were given on the assessment of the training included;

- Generally good but I feel we needed more time for practical sessions.
- Resource persons were well equipped; content on pedagogy was loaded; Health breaks were useful I would prefer more time to be given to digital development
- The workshop was well organised and necessary for online teaching/training
- This was a good training and well organised
- Training approach as excellent

4.2 Training Modules

In terms of the participant's opinions towards the different learning sessions the results indicated that; majority of the participants said that the sessions were *very useful* to their learning and knowledge creation as illustrated in the table below;





| Session | Very useful | Quite useful | Some aspects were useful |
|---|----------------|-----------------|--------------------------------|
| Teaching and Learning with Technology | 64.3% | 35.7% | 0 |
| First Steps to Effective E-Learning | 64.3% | 35.7% | 0 |
| Evaluating E-Learning and Course Development | 85.7% | 14.3% | 0 |
| Effective E-Learning Content Design using the Learning Object Concept. | 71.4% | 28.6% | 0 |
| Content Development (using exe) | 78.6% | 21.4% | 0 |
| Content Development using multimedia(visual design, infographics, animations) | 78.6% | 14.3% | 7.1% |
| Introduction to digital Assessment (using Hot Potatoes tool) | 64.3% | 28.6% | 7.1% |
| Practical exercises | 64.3% | 35.7% | 0 |

Table 2: Participants level of satisfaction with the different training sessions

These results were also backed by the participants who presented their assignments that were posted on the LMS and indicated that "they have learnt new skills and with more practice they will be able to improve".

The participants indicated that they felt the topics were appropriate and useful for them in terms of E-learning preparation for their learning and use during teaching. The interactions with the participants indicated that they were appreciative of the topics taught to them during the training. However, they also indicated that they were overloaded due to the fact that the time available was little for all content to be grasped. This deduces to the fact that in the future such practical training sessions should be given more time and scheduled during morning sessions because the participants.

In terms of the other desired modules to be covered in future trainings, the participants suggested; use of E-learning to conduct lab practical experiments, dangers of E-learning, training about MEAL and data analysis, how institutions can develop their own authoring tools and e-learning for practical based subjects among others.

4.3 Relevancy of the training





Due to the current world break out of covid-19, e-learning was opted as the best way of providing educational service to students therefore majority of the participants **92.9%** indicated that the training was very relevant to them (refer to figure 3 below) since it equipped them with the necessary skills to successfully run an online class and develop content for the learners to easily understand.

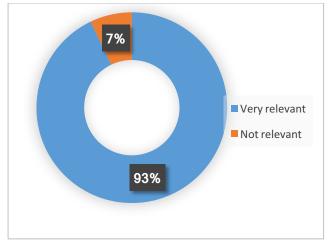


Figure 3: Relevance of the training

5.0 OBSERVATIONS AND CONCLUSIONS

After having undertaken the training some observations came into light that need to be shared for future improvement of the training.

- 1. The time allocated to the training was really short and needs to be increased in the other training sessions most especially if the training has a practical component.
- 2. Some of the staff within the institutions of learning lack the adequate ICT literacy skills to ably use to develop content to use in teaching and learning
- 3. Several staff were using institutional ICT during the training and lack personal computers to use to learn better the skills

In conclusion, the training was undertaken very ably by the consultant and participants appreciated very much the methodology used during the training sessions. Participants preferred to have more practical sessions of the trainings and they felt it adds value to the entire training.





Use of technology in teaching and learning should be more encouraged in all future training sessions thus improving education service delivery. RUFORUM should make sure that they acquire their own learning management system so that participants can ably access the resources for a longer period of time.