



Workshop Objectives

- Introduce current STEM pedagogies and curriculum ideas for better preparing science and agriculture teachers in Malawi.
 - Discuss opportunities for course delivery through Open Distance Learning (ODL) for increased accessibility.
 - Develop a Certificate Program Proposal in STEM Education for secondary school teachers.
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How do you see STEM education connecting to local communities?

- Use of indigenous knowledge
 - Teachers are likely to understand the language and the customs
 - Combines both indigenous and scientific knowledge
 - Use of local culture and environment
 - Allow people from local communities to contribute towards the improvement of learning
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How do you see STEM education connecting to local communities?

- Community participation and support
 - Very possible if planned well in consultation with the community
 - Local structures can properly support STEM education
 - High possibility of it happening provided community stakeholders and students themselves support
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How do you see STEM education connecting to local communities?

- Use of blended modes will connect STEM education to local communities
 - Through ODL – use of ICT
 - Will help to create a network among learners (what they do in a classroom) and how they can relate it to everyday life...
 - STEM education is a tool for solving local communities problems - providing solutions to the local economy
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Science and Ag Teacher Education and Curriculum Development

Goals

Equip students with relevant knowledge and skills on content and pedagogy

Develop a responsive curriculum for socio-economic development

Effective teachers

Innovative and reflective teachers

A teacher who can facilitate learning

Teacher who is creative in

resource mobilization and practicals

Needs

Personnel with relevant experience in teacher education

Relevant resources

Supportive environment for learning

Infrastructure conducive for teaching and learning

Content

Methodology

Principles of science learning and teaching

Research skills

Use of modern technology – ICT

Using indigenous knowledge

Skills for assessment learning

Appropriate pedagogy for handling large classes

Qualified teacher educators

Needs assessment for the status quo

Stakeholder participation

Resources

Computers

Challenges

Institutional capacity

Classroom space

Limited funding

Ineffective policy on PPP

Innovation in context

Resource constraints

Recruiting

Large classes

Political will

Ideas for Success

Capacity building

Pilot ideas at small scale

Engaging both technical and policy personnel

Using locally available indigenous technologies and the local environment

Using nearby secondary schools for practicals

Strong relationship between the colleges and teaching practice scholar

Effective policy on PPP

Resource mobilization

Collaboration

Creativity & Cost Sharing

Establishing satellite centers

Adequate staff/HR

Engage in innovative teaching

Attachments