Project summary

Institute of Meteorological Training and Research (IMTR) Training modernisation

Introduction

In recent years the Met Office College has built a strong collaborative relationship with the Institute for Meteorological Training and Research (IMTR), the training institution within the Kenya Meteorological Department (KMD). IMTR is a designated World Meteorological Organization (WMO) Regional Training Centre (RTC), for English-speaking Africa and as such is expected to provide training that supports the region's National Meteorological and Hydrological Services (NMHSs).

The Met Office College and IMTR collaborated in 2016 on developing a Basic Instructional Package for Meteorologists (BIP-M) compliant forecasting course, in accordance with WMO Education and Training Standards in Meteorology and Hydrology. The project was funded by the UK Department for International Development (DFID) and was part of the Weather and Climate Information Services for Africa (WISER) programme.

Blended learning

The aim of the IMTR modernisation project was to develop a course using modern, applied teaching techniques and training best practice, including the use of technology in a blended approach. This approach leads to improved engagement from the learners and therefore better retention of knowledge and skills.

Blended learning combines traditional and digital technologies in a way that helps learners learn more productively. Digital technologies can be used in class, or beyond the classroom, to enhance learning by offering specific types of benefit that are more difficult with traditional methods[1].

The project began early in 2016 and one of the first milestones was to introduce the concept of blended learning to all involved. Seven IMTR trainers, along with trainers from the Met Office College, attended a 'More Than Blended Learning' course. This was run by Clive Shepherd; an expert in blended learning techniques.

Met Office College and IMTR trainers celebrating success in passing the 'More Than Blended Learning' course. Met Office, April 2016

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[1] Futurelearn.com Blended Learning 2017

Development of learning materials

A blended plan was produced for each of the topics within BIP-M. Learning materials were developed from these plans with appropriate use of technology and applied teaching methods, and a series of train-the-trainer exchanges were held at IMTR to support the development.

In November 2016 a new three week 'Introduction to Climatology' (ITC) course was delivered at IMTR Nairobi. This was a pilot course and standalone, but also BIP-M compliant, and therefore could be incorporated into the forecasting course as required. Trainers from the Met Office College worked alongside trainers from IMTR and the University of Nairobi to deliver a course to 19 delegates from eight African countries. The course helped participants understand the complexity of the climate system and engage in discussions surrounding climate science, climate change impacts, adaptation and mitigation, whilst building capacity of staff at IMTR. A blog on this course can be viewed by following the link.

Delegates on the ITC course carrying out activity-based learning. IMTR Nairobi, November 2016

Course feedback

Excellent feedback on the course was received from delegates.

"It wasn't all about the trainers, we were very involved"

"Very engaging and practical (hands on)"

Next steps

A possible second phase of the project would allow the Met Office to co-deliver the new course at the IMTR Regional Training Centre in Nairobi, and participants from across the East African region could be invited to attend through the WMO. This would allow a trial of the new method of delivery, which proved so successful on the pilot course, and to further develop the capacity within IMTR to deliver a similar course in the future.

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