



IAEA

International Atomic Energy Agency

Atoms for Peace

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Introducing ICT based training methods to strengthen training capacity in AFRA Member States

The challenge...

Significant efforts are being made to consolidate basic scientific and technical infrastructure to ensure the sustainability of national nuclear institutions within the AFRA Member States. The development of sufficient qualified human resources is of high priority. However, conventional education and training through fellowships or group training suffer from a number of restrictions, including limited access, cost effectiveness, language and even cultural barriers. In addition, group training is generally not able to address individual needs, nor to respond to the inevitable varying levels of participant preparedness, comprehension, pace and ability.

Fortunately, tremendous advances have been made in information and communication technology (ICT), and as a result, new learning methods, formats and resources are being developed. ICT also offers mass customization as technology allows individual differences in the goals, learning styles and abilities of the trainees to be accommodated. It also provides immediate feedback on progress made and results achieved, thus enhancing productivity and positively affecting national development needs and programmes.

The project...

The project began in 2003, with the goal of using ICT to develop and deliver innovative learning/training methods to strengthen and expand AFRA Member States' capacities for sustainable human resource development. Participating countries provided premises, human resources, communication facilities and logistics for the telecentres to deliver and disseminate ICT based training.

The IAEA provided expert services, training, ICT equipment including PCs and software, and teaching materials. The project focused on training nuclear engineers, computer scientists and technicians in nuclear science and technology to be applied in agriculture, human health, environmental monitoring, management of water resources and nuclear instrumentation.



First AFRA conference on ICT, convened in Niamey, Niger

The impact...

- Seven regional training courses were held between 2003 and 2007.
- The first conference on ICTs in training and learning in nuclear science and technology in Africa was hosted by the Radioisotopes Institute of the Abdou Moumouni University of Niamey in November 2007 in cooperation with the IAEA. It recognised benefits, enhanced awareness and stimulated new ICT initiatives in Africa.
- ICT telecentres were provided to Ethiopia, Mali, the United Republic of Tanzania and Uganda.