

Improving Professional Capacities Through E-Learning by The Food and Agriculture Organization of the United Nations (FAO)



Name: Improving professional capacities through e-learning

The Food and Agriculture Organization of the United Nations (FAO) receives frequent requests from its Member Nations for assistance in developing and improving their technical capacities and to provide them with appropriate tools and methodologies. FAO has responded to these requests in the past by providing technical assistance through training, backstopping and the provision of technical advice. However, in recent years, FAO's human resources have been insufficient to address all of the Members' requests for capacity development and technical assistance. FAO thus commissioned a study in early-2000 which proposed a framework for distance learning for FAO. Self-paced e-learning was selected as the best mode of delivery and has proven to be a cost-effective and efficient mode for delivering training and increasing the technical capacities and knowledge of agriculture and food security professionals. The courses use state-of-the-art technologies to create an interactive, self-paced learning environment while meeting the needs of low bandwidth users and those working on older systems.

Description of the approach: E-learning as part of FAO's Capacity Building efforts

During the past 6 years, FAO has collaborated with external partners to develop and deliver a series of extensive self-paced e-learning courses as part of its efforts to: i) build awareness and understanding; ii) provide on-the-job training for technical staff; iii) make available tools, methodologies, guidelines and learning materials; and iv) support face-to-face training and other capacity building activities.

At the ECOSOC Innovation Fair, FAO would like to highlight the following examples of asynchronous self-paced e-learning being conducted in the following areas:

- **Information Management Resource Kit**: A series of e-learning modules to build capacity at national and local levels to manage and share information more effectively, by increasing the awareness, understanding and skills of individuals responsible for information management in food security and agricultural agencies, institutions and networks.
- **Food Security Information for Action**: A series of e-learning courses on the collection, management, analysis, and reporting of food security information. The target audience includes technical professionals as well as policy formulators and programme managers monitoring progress in poverty reduction, and meeting food security goals and targets.
- **The Right to Adequate Food**: A series of e-learning materials are being developed to support the progressive realization of the right to adequate food. The course is targeted for use by FAO and UN staff, duty bearers at national level (legislators, parliamentarians, institutions, judiciary, policy makers), as well as NGOs, civil society organizations and social movements dealing with human rights.
- **Enhancing Participation in Codex Activities**: An e-learning course which explains the organization, management and procedures of the Codex Alimentarius Commission, and provides guidance on developing national Codex structures and activities. The overall objective is to enhance countries' participation in the development of international food

standards through the Codex process. The course targets government officials, as well as representatives of food industry, consumer groups, and observer organizations.

Implementation methodologies: Self-paced e-learning suited to low-bandwidth environments

Each curriculum is designed through a consultative process with subject matter experts, field practitioners and target audience representatives. FAO and partner institutions adapt the learning content into different languages, and provide expert reviews and quality control of localized content. A wide range of instructional methods in e-learning are used such as storytelling, illustrative case studies, simulations and demonstration, as well as interactive tests and practice exercises. The Reusable Learning Object (RLO) strategy is used to group learning content into 20 – 60 minute stand-alone, modular lessons which are then assembled into learning modules. The lessons are independent and the individual learner can create a tailored course by designing their own Personal Learning Path specific to suit a particular training need. A wide range of resources are included with each course such as links to online resources, recommended reading, self-study tutorials, practical guidelines, non-proprietary software applications and tools.

The courses are freely available on the Internet, as well as on CD, to ensure access to developing country learners subject to low-bandwidth and/or high connectivity costs. As the modules are targeted for use in developing countries, the CD-based product operates on a Pentium I class computer with as little as 32 Mbytes of RAM, allowing older generation computers to deliver the e-learning courses. For several courses, learners can access an e-mail and web-based "virtual" community. In order to provide support to workshops and training events, the e-learning lessons are being adapted for use in face-to-face training as a series of presentation slides, student handouts, class activities and job aids. These serve to reduce workshop preparation time, and support train-the-trainer efforts of FAO and our UN, national and regional partners.

Innovative aspects

The methods used to create and deliver the courses ensure that the materials are both accessible and applicable for use in developing countries. The needs of the target audiences in developing countries are considered in all aspects of curriculum design and content development through consultations, involvement in the authoring and translation process, and through the use of technologies which are suited to environments subject to low-bandwidth or limited Internet access. The availability of face-to-face materials derived from the e-learning lessons has reduced the costs and preparation time for delivering face-to-face training by providing high-quality materials for classroom use, and by providing sufficient materials for regional and national institutions to deliver training on their own.

Evidence of results-impact

FAO now has 8000 registered learners on the IMARK website, and a total of 48,500 CDs have been delivered since 2003, with 15,000 of these distributed through partner organizations. A learner survey conducted in 2006 has shown that 98% of respondents liked the learning style, 83% recommended the module to others, 59% created a personalized curriculum, 93% gained new knowledge and skills, and 89% used the information learned on the job.

Costs

The development costs for non-staff resources range between US\$ 40-300,000 for the first language version (English) per course depending on the number of lessons, with adaptation costing US\$10-50,000 per language. To date, given the number of CD versions distributed so

far versus production costs, this amounts to an extremely low cost of around \$10 per learner. FAO's per capita costs for face-to-face training generally run at more than 100 times this amount per person. FAO has attracted more than US\$1,400,000 of extra-budgetary investment from development partners and donors for the development and adaptation of the various curricula.

Contact information

C. Andrew Nadeau
Information Management Specialist
Capacity Building and Outreach Branch
Knowledge Exchange and Capacity Building
Division
andrew.nadeau@fao.org
++39 06 5705 3876
www.fao.org
www.imarkgroup.org

Denise Melvin
Information and Communication Officer
EC-FAO Food Security Information for
Action Programme
denise.melvin@fao.org
+39 06 5705 4003
www.fao.org
<http://www.foodsecinfoaction.org>