Integrating ICTs in Vocational Training: A Pilot Project Step-by-Step

A blackboard and chalks used to be the only ‘tools’ that tailoring instructors in Isinya, Kenya had access to for drawing dress patterns. The result is not difficult to imagine: an inefficient process that had instructors come to class every day an hour earlier to have enough time to draw their patterns by hand. And if changes were needed - for instance in size -, they would have to do this all over again.

In the Isinya Youth Polytechnic (YP), a vocational training institute, about 80 mainly Masaai students are trained to become not only tailors but also car mechanics, bricklayers and carpenters. ICT was part of their curriculum too, but with only three desktops in a separate room, most students never got beyond typing.

But this is about to change. After much preparation and thanks to youth-training experts Nairobi Bits, Kenyan NGO Dupoto-e-maa and the Connect4Change consortium...
led by IICD, the Youth Polytechnic has recently started the training of their instructors in ICT-integration.

The pilot project is done in collaboration with the Ministry of Education office in the area (formerly the Ministry of Youth Affairs and Sports) and the board and instructors of the Youth Polytechnic.

When the project is fully operational, these tailoring instructors will use digitalized dress patterns in their lessons. They will draw up just once and will be able to use and manipulate the drawings time and again. It will also allow instructors to include pictures and video: why not show animations of working car parts in your class on car mechanics?

The starting point

In 2011, IICD organised a visit of representatives from the Ministry of Youth Affairs and Sports and Nairobits to the Chawama Youth project in Zambia. Here, IICD has supported ICT integration in Vocational Training for several years and the representatives were able to see what this entailed: the use of ICT tools in the vocational training rooms to improve teaching and learning. This visit became the basis for the pilot in Isinya.

Low-cost interactive white boards

The pilot in Isinya focuses on two areas of ICT-integration in the YP. The first one involves a 20-workstation computer lab (a low cost, low energy thin-client solution) where students are trained in basic ICT skills and the use of ICT tools for entrepreneurship, for instance by keeping financial records or inventories. Besides this, all vocational training rooms have been outfitted with a laptop, projector and a projector pal, allowing the set-up to be used as an interactive whiteboard.

Training and content development

IICD advised on a training curriculum for the instructors, working together with Nairobits. All YP instructors have now been trained in the use of the equipment and in working with their students in an interactive way. Currently, the focus is on the development of lesson materials. Here, instructors are supported to translate their existing teaching notes into materials that can be shown and interacted with in the classroom. This process builds on the process of content development based on IICD’s experience in various countries. This entails working from the teacher’s experiences rather than a pre-set set of materials. An approach that combines well with Nairobits’ expertise in developing job-oriented lesson materials for students.

The Framework
Starting with a small pilot was a conscious choice: a low-key approach that allows for experimentation and focused attention on the capacity development of all 12 instructors in the YP. Furthermore, a great deal of attention goes into carefully involving all stakeholders and recording the steps taken. All experiences are captured in a clear “Framework for ICT integration in Youth Polytechnics”, showing the different aspects of this project step-by-step: from starting an ICT integration in a YP, to technology selection and training of instructors.

The framework will be presented during a launch at Isinya YP in July 2013, for an audience of instructors, other YPs, government officials and other parties interested in Vocational Training. If you are interested in joining the event or if you would like to receive the Framework, you can contact IICD’s country manager for Kenya, Anne-Marijke Podt