Background

HPI provides mobile systems to support e-learning in Palestine
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Potsdam. The e-learning technology "Tele-Task", developed at the German Hasso Plattner Institute (HPI), will prospectively help to compensate for certain shortcomings in the training of Palestinian IT specialists. Four handy, mobile systems will be employed in different universities: at Birzeit University (near Ramallah), An-Najah National University (Nablus), Al Quds University (East Jerusalem), and Palestine Technical College (Gaza). The easy-to-handle systems enable the recording, storage, and on-line transmission of lectures. The course offer in various academic programs can thus be expanded and more Palestinian students will receive a comprehensive education. The use of Tele-Task is intended to counteract the effects of limited mobility and academic qualification among teaching staff.

As Prof. Christoph Meinel, the Insitutes scientific director and CEO, remarked in 2008 during a trip to Palestine on behalf of the Federal Foreign Office, some universities, particularly Birzeit, already possess a good technical infrastructure for recording lectures (tele-lecturing) and other related activities. The benefit of the Potsdam-made Tele-Task system lies in its potential to overcome mobility limitations imposed by the numerous Israeli checkpoints.

The most pressing task to be addressed in order to solve a number of current difficulties, according to Meinel's observations, is the academic qualification of teaching staff. Particularly on the level of Master's programs, tele-lecturing and impulses for new research projects are much in demand, as talks at Al Quds University have shown. Up to now, teaching at Palestinian universities has been in the hands of a small number of experts, most of whom graduated with a "Magister Artium" or a PhD. Consequently, support capacities for doctoral candidates are very limited.

In order to bridge the time needed to build up a stock of Arabic lecture recordings, existing English-language Tele-Task material from Germany can be used. This suggestion of Meinel was met with strong approval and great demand by the Palestinian stakeholders. "In spite of this offer from our side, it will be crucial to build up a comprehensive stock of Arabic lectures shortly", the German computer science professor said. Such an Arabic archive would have the potential to promote identity formation and to pave the way for a more autonomous education of junior academics and for professionalization in the Palestinian territories.

The four mobile Tele-Task systems provided will reduce the teaching load for the limited number of staff. Furthermore, the technological support that IT departments receive will enable Palestinian universities to produce and market their own material for lifelong learning and continuing education in Arabic language.

In Meinel's view, the target- and market-oriented training of Palestinian junior IT specialists with the help of Tele-Task could also strengthen the Palestinian economy importantly and facilitate cooperation with German companies. "What the Palestinian Industry and Trade Association, PITA, criticizes about national computer science education is the insufficient consideration of industry requirements", the Potsdam-based professor reported. The curricula of IT-related university programs could be complemented by recordings of both educational lectures and expert presentations held by industry representatives.

As early as in the fall of 2008, the Hasso Plattner Institute established a funding program for Palestinian researchers in the field of computer science. The institute has since been supporting the education and qualification of academic teaching staff by providing two PhD grants. The two Palestinian junior researchers working in Potsdam specialize in e-learning and IT security.

Tele-Task at a glance

Tele-Task (Teleteaching Anywhere Solution Kit) is an innovative technology by the German Hasso Plattner Institute that enables the recording and transmission of lectures and presentations via the Internet. The professional and well-tried system solution is characterized by simple handling and an excellent image and sound quality. Thanks to Tele-Task, anyone around the world can view trainings, presentations, and events via the Internet, accessing both live streams and archived recordings. Users can make their own content available on the Internet and for use with portable devices such as iPods, PDAs, and mobile phones, or publish it on CD-ROM or DVD. Recipients can thus use their time most efficiently and study independently of their whereabouts. The Tele-Task system comes in a handy box containing an individually configured computer with ready-to-use software as well as a video camera, a microphone, and connecting cables. Tele-Task videos and Podcasts display not only the speaker, but also the corresponding presentation (laptop or board). Conventional e-learning videos, by contrast, record only the speaker plus sound, or presentation slides plus sound. The HPI system uses a picture-in-picture technology that can be adapted to the smaller displays of iPods or other mobile devices.

Short profile of Hasso Plattner Institute

The Hasso Plattner Institute for IT-Systems Engineering (HPI) in Potsdam is Germany's university excellence center for IT-Systems Engineering. It is the only university institute in Germany to offer a Bachelor's and a Master's program in "IT Systems Engineering" – a practice- and engineering-oriented

alternative to conventional computer science studies. Current enrolment is at about 450 students. Overall, a good dozen professors and more than 50 other lecturers, visiting professors, and contract teachers work at HPI. The institute conducts excellent research, not least for renowned industry and business partners. The primary area of research is the basics of and applications for large, highly-complex, and cross-linked IT systems.

Since October 2005, HPI has its own international graduate school, the Research School on "Service-Oriented Systems Engineering". In October 2007, the "HPI School of Design Thinking" was established, Europe's first innovation school. Every year, it teaches 120 students from various disciplines to develop user-friendly IT-related products and services in multidisciplinary teams. The school is run in close cooperation with Stanford University in California. In November 2008, the two schools launched a joint research program on innovation. Furthermore, HPI cooperates closely with Israel's Technion, the Massachusetts Institute of Technology (MIT) in the U.S., the Technical University of Beijing, the University of Cape Town, and various European universities.