

Knowledge Economy for Wh

Task for Europe in Internationalisation of Education

Martien Molenaar and Fred Paats have undertaken international projects, consulting missions and lectures in diverse countries for a considerable time now. Martien Molenaar is Rector and Fred Paats is Head Education of ITC, one of the few institutes in Europe with an international focus. According to these gentlemen cooperation and exchanging knowledge are what it takes to help countries that are economically and/or technologically less advanced.

By Sonja de Bruijn



Fred Paats (left) and Martien Molenaar, respectively Head Education and Rector of ITC, the Netherlands.

Developing Countries

The International Institute for Geo-Information Science and Earth Observation (ITC), briefly discussed in *GeoInformatics* 4-2006, pages 48 and 49, has a 55-year history in international education, research and projects. More specifically: helping developing countries gaining more knowledge on geo-information science and earth observation. Striking is the fact that ITC offers courses at different levels of education in a relatively well focussed and coherent field. Students can follow both short and long courses leading to Master of Science (MSc) degrees, Master degrees, Postgraduate diplomas (PGD), diplomas and certificates. To address the increasing demand for flexi-

bility in academic degree and diploma programmes, ITC has engaged in partnership arrangements with reputable qualified educational organizations in joint education programmes in a range of countries, 13 at the moment which will be extended to 20. The advantage: people don't need to leave home or work for a longer period of time. eLearning is in an experimental phase: introduction modules are currently running. This is done for two reasons: supporting ITC's joint education programmes and meeting the growing demand for a direct eLearning service. As Paats says: "We are doing everything to ease access to the knowledge at ITC and to prevent people from being away from home and work for a long time."

Seeking Advice

As Head Education for ITC Paats has a strong international focus. He has worked in Africa for 7 years and has been involved with the Dutch institute for 22 years now. He makes clear that in the Netherlands universities and colleges are currently seeking advice from ITC on how to internationalise. They need to be able to profile on a European level as well as strengthen knowledge acquirement at the institutes themselves.

It is Molenaar's concern that the present internationalisation of higher education is mainly focusing on strengthening the Dutch or European knowledge economy instead of purely being aimed at the developing countries. In general he is not very charmed with the Dutch immigration policy, which seems to cause an administrative barrier not always taken anymore by foreign students. "It can be quite humiliating being treated as somebody who just wants to enter the Netherlands for opportunist reasons. We are not the only organisation noticing this. The International Criminal Court for example also bumps into obstacles when trying to get people come over from other countries. This way the Netherlands is becoming unattractive for foreigners."

EU Students

ITC is one of the five institutes for international education in the Netherlands that is aimed mainly at less developed countries. Other institutes and universities that are internationally active offer courses mainly to EU students but much less to students outside the EU. Worldwide institutes of this type are quite rare, at best as a side task of a university or institute. Up till four years ago the ITC Master and MSc degrees were not even officially part of the Dutch system for higher education. Like the Dutch Universities, ITC currently provides officially recognised Master degrees. All these institutes are financed by the Dutch Ministry of Education.

All ITC courses are aimed at the use of Geographical Information Systems. Molenaar: "Already in the initial ITC concept it was stated that countries need maps to control resources and arrange space. Although we now talk about geo-information instead of maps, this aspect is still very important."

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Community mapping of crime spots, Punhuato, Morelia, Mexico during fieldwork; an integral part of ITC's courses (photo R. Maneja).

Think in Processes

Due to cooperation with other institutes in the Netherlands Paats notices that spatial thinking often is not embedded in other specialist areas. "At the University of Twente, for example the department of public administration, people think in processes without a spatial component. It is interesting to see these two worlds coming together and strengthening each other: the UT can embed a spatial connotation in their education system for Dutch students and we can use their process-like ideas regarding management processes for integration in our activities in developing countries."

Molenaar agrees and adds: "We notice that other disciplines are starting to realize that all human and management actions have a spatial footprint. All human actions are done spatially. Decision making often takes place in the light of economic balancing, but since space is becoming more scarce it is becoming part of your cost factor. This is why the link with spatial components is becoming more evident." Paats: "Borders between old disciplines are fading. While the cadastre used to be quite technical, nowadays you can see municipalities all over the world offering digital desks with the cadastre as a basis. Developing countries are very interested in this aspect."

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Implement Knowledge

Students at ITC mostly have a Bachelor of Science degree and about 7 years of working experience. The organisation they are working for wants them to do additional trainings. The goal of ITC and other similar international institutes is having these people implement their knowledge within their organisation. One can think of better service, better management or better access to and use of information technology.

"Most of our students work with the government or non-governmental organisations (NGOs), but we would like to see the private sector more present", says Paats. "This is partly our concern, because from the beginning we were aimed at (semi-)governments. But I also think that for authorities it is easier to send somebody away than it is for the private sector."

The Head Education adds that the private sector is insufficiently represented. It is his opinion that the usefulness of geo-information

should be put forward more with NGOs.

However, the ITC diploma course on Geoinformatics is quite popular in the private sector in Saudi Arabia for example.

Prove the Benefit

Molenaar expresses his concern about the attitude of the Netherlands with respect to our responsibility to developing countries. "More and more we have to prove the benefit of what we do for the Netherlands as a country. It is not self-evident anymore. On the other hand higher education is internationalising very fast which means ITC has to set the pace to make clear our role and which needs we are fulfilling. Since the Dutch policy is aimed at enforcing the Dutch knowledge economy we need to justify our activities more and more." Another development is that ITC needs to fit more and more into the framework and quality demands laid upon higher education in the Netherlands. "But that is not our aim. Our aim is capacity building in developing countries",



Course participants of the ITC remote sensing course module in Thumphu, Bhutan.



ITC has engaged in partnership arrangements with reputable qualified educational organizations in joint education programmes in a range of countries.

says Molenaar. "We must keep our balance between the Dutch policy with respect to higher education and our mission". The countries we are operating in are also making more demands. Of course it is good to notice that this brings forward a higher level of professionalism and a clearer role of ITC in the Dutch educational system."

Enhance Quality

Molenaar also highlights the fact that instead of acting as an independent organisation taking part in international networks occurs more often, like Erasmus Mundus, which is funded by the EU. This co-operation and mobility programme in the field of higher education aims to enhance quality in European higher education and to promote intercultural understanding through co-operation with developing countries. For example, as an Associated Institution of the United Nations University in Tokyo, ITC and the UNU developed a joint programme for capacity building in land administration and disaster management. The inter-governmental Group on Earth Observations (GEO), contains a chapter on capacity building, which will be lead by ITC and other institutions. "There are several advantages to this cooperation: broader market access, access to external knowledge which can be merged and

jointly acquiring the (financial) means for this project."

Another major change Molenaar detects is the movement from a technical orientation on the topics taught at ITC towards the role of these topics in governance. "The industry offers technology, the question of government is: what can I do with it? People are more aware of the fact that they are acting in space. And how information on earth observation and geo



Education at ITC, a multicultural environment (photo © 2005: Gerard Kuster).

information sciences can support this. This is a question ITC needs to answer more and more. Developments in the upcoming ten years will be strong, and there is a clear mission for ITC in all this. Not only for us but other European institutions are playing an essential role in this too. This really means sharpening your standpoints and aims and making clear arrangements with your financiers."

Group Work

At ITC exchange of knowledge between students and practical examples instead of lots of theory are very important. Group work is done more and more, but there is a dark side: some students are not used to this. They have been educated in a traditional way where listening to the teacher instead of interaction was common. Such students will never ask a professor a question. But when they are coupled with students from a culture where this is not the case, they do dare asking questions. Sometimes however participation remains a problem. On the other hand Paats notices that many students are very diligent: they come back to ITC after dinner to practice once more. Paats: "Another difficulty we are facing are the different entry levels of students enrolling in ITC's courses. Each year we are working with 70-80 different countries, all with different education systems. It is a challenge for us to deal with these different entree levels. Partly this has to do with the computer skills. Even five years ago many students had never worked with a computer, they were only allowed to look at their boss' pc. Nowadays they are bringing their own laptop. But there are still countries that are lagging behind. Fortunately we have the means to pay special attention to such students. Language is a different issue: we assume that everybody taking part in our courses is capable of speaking and understanding English."

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More info on ITC via www.itc.nl.

Erasmus Mundus: http://ec.europa.eu/education/programmes/mundus/index_en.html and www.gem-msc.org

GEO: www.earthobservations.org