

4B Training for the future

The chair for this session was **Jean Cooper** (A/Director General, Mapping Services Branch, National Resources Canada)

4B.1

Menno-Jan Kraak (ITC, Netherlands)

Presented the paper :- **National Mapping Organisations as learning organisations.**
Summary :

The paper was based around learning in a changing time.

- WHY should NMO's learn
- WHAT “ “ “
- HOW “ “ “
- WHEN “ “ “

The paper then considered elements such as technology, institutional and user issues around change in a changing world. Customer lead product development.

The chair questioned should you teach existing staff or look to the market for IT and management skills?

Response from the floor was that it was difficult to fire staff therefore it is important to find new ways to train older staff members.

Peter Cox (UK Hydrographic Office) said that there is a need to diversify and to plan as he will lose staff over the next ten years and these will need to be replaced. The plan in his organization was to train the new staff in some of the old skills and vice versa to ensure a good balance.

Babu Ram Acharya (HMG Survey Department, Nepal) How do you produce the required new products with the existing staff who have an existing skills base?
Looking at both human resource and technical issues.

Martien Molenaar (ITC, Netherlands) The best way is to introduce staff in advance to the new production methods and systems, getting them to buy into and even drive the move to the new methods. Develop implementation programs, you may not be able to fire people but you can always fire at them.

The Chair said building competency profiles for the future vision of the organization and union discussion helps, but there will always be some staff who do not wish to change. These staff should be assisted to find jobs where they will be happy and can make a meaningful contribution.

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Kemueli Masikerei (Department of Land & Surveys, Fiji) We continually lose young staff to the private sector as we are unable to match their pay structures. Short term training is important to maintain the skills we need.

David Woolnough (Centre of Geographic Sciences, Canada) NMA's should continually analyse themselves, to look at skill levels. Institutional change must be agreed at senior management level, or it will fail.

4B.2

Dimitri Kanounnikoff (National School of Geographical Sciences, France)

Presented the paper :- **Mainstreaming geographical information into the information systems training programs.**

Summary:

The paper covered the integration of GIS into established IT systems, understanding the customer's business processes. Employing staff with ideas for now and the future. In addition to the private partnerships were also discussed.

Dimitri asked the following questions of the delegates :-

1. Should NMA's be involved with Universities?
2. Do we agree with specialised or Integrate GIS solutions?
3. Does this also work for the developing countries?

David Woolnough (Centre of Geographic Sciences) said many large organisations do not have the ability to provide these services. Who is the best to do the retraining?

Martien Molenaar (ITC, Netherlands) said that geoinfo at ITC is an educational program, focusing on subjects and a training style to ensure that students are adequately prepared for the future. ITC develops engineers with the ability to look at problems in a way to develop solutions as required by the circumstances.

Qassim Al Ghanim (Ministry of Municipal Affairs & Agriculture) said that on the job training and vendor training for users was useful. For their instructors academic courses, run by established organisations, had been successful.

Dimitri Kanounnikoff said that hands on and designed training is what NSGS uses for students. We need to further understand business to enable us to provide the trained students that they require.

4B.3

Dave Chapman (UCL Business UK)

Presented the paper :- **UCL (University College London) – Teaching, Research and Innovation for Geographic Information Professional.**

Summary:

How should universities respond to the short term needs of business?

How should NMO's work with Universities?

The paper covered the advantages that universities have in the diverse skills areas that they can involve in consultancy projects. It covered research projects teaching styles

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and links to the commercial world; and how GIS was seen as key to maximising these business links.

Qassim Al Ghanim (Ministry of Municipal Affairs & Agriculture) said that universities should not waste their time producing courses based on the short term needs of business. It would be better to spend time marketing existing programs. Combined with tactical research to understand business needs.

Dimitri Kanounnikoff (National School of Geographical Sciences, France) said the question is How will the private sector react?

Martien Molenaar (ITC, Netherlands) said we should not give society what it asks for; give it what it needs.

Dave Chapman said that they keep in contact with their ex students, taking feedback from them as to how courses should change. They also get them back to the university to present to the students on how and what they need to understand. People are being left behind, and that you can not force people to retrain. Universities used to be in a better technical position in terms of IT hardware than business. This is no longer the case. The way they work now is to build relationships with business and to make more use of the skills they have in other departments of the university to enable them to for example use the skills of the epidemiologists with the GIS staff to report on crime mapping.

Scott Baggie (Survey Department, British Virgin Islands) we should be looking to learn continually during our working life with specific retraining being provided as required to existing staff. Motivated individuals want to keep learning throughout their careers, this builds staff that wish to stay with an organisation. Younger trained staff move on, you need to look to train the older staff to maintain business stability

Eydis Lindal Finnbogadottir (National Land Survey of Iceland) asked where does the evolution of the mapping production occur? Within universities or business?