FIG International Workshop
Sharing Good Practices: E-learning in Surveying, Geo-Information Sciences and Land Administration
ITC Enschede, Netherlands
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Jointly organised by FIG Commissions 2 and 7 and the International Institute for Geo-Information Science and Earth Observation

Report by Richard Grover

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Basic facts

- 70 participants from 26 countries
- 32 papers
- Keynote addresses included ones by Dr Nicholas Frunzi (ESRI), Prof Bela Markus (Chair of Commission 2) and András Osskó (Chair of Commission 7)
- 4 discussion groups – **<u>ALL</u>** participants took part in these
- Hands on sessions on Capitivate® for Animations and Simulations, creating a Wiki, quick and easy lecture video recording, and communicate, collaborate and educate with Elluminate®
- Best paper by Dr Henny Mills (University of Newcastle, UK) *A Virtual Surveying Field Course for Traversing*
- Papers and presentations available on FIG website http://www.fig.net
- Report on workshop by Liza Groenendijk on FIG website

Education issues influencing development of e-learning

- A paradigm shift from teaching and instruction to learning
- The need to produce graduates with collaborative skills, who are good communicators, and able to continue learning after graduation
- A change in focus from what professors deliver to what students learn and from educationalists want to teach to what students and stakeholders like employers want learning to comprise
- Financial constraints promoting search for lower cost solutions

Contribution of ideas and solutions from "learning organisations" other than academic establishments

Driven by

- Lack of capacity and need to increase it
- Technological change and the need to train staff in new technology;
- Changes in financial circumstances resulting in changes in the way in which services were delivered
- The need to retain knowledge and experience locked up in the brains of older staff coming to the end of their careers

Examples of lack of capacity and need for large-scale training

Jim MacKenzie

- Reported on the capacity problems faced by Natural Resources Canada.
- Number of graduates approximately 50% of those needed
- Ageing profession
- Demand to train aboriginal land managers due to resolution of land claims by First Nations

Battogtokh Demchig

- Cadastre in Mongolia been introduced
- Need to develop a fiscal cadastre since the privatisation of land in 2003
- Need for officials to work in land registration, transfer and mortgages

Examples of need to capture knowledge held informally

Co Meijer

- Described how Dutch Kadastre was closing local offices as access to data had moved to the internet.
- Smaller workforce was required as a result of automation.
- Kadastre faced with an ageing workforce who will retire shortly and take their experience with them.

Ezzatollah Mohammadi

- Described how in Iran the cadastre was established in 1987 but registration dates back to the 1940s.
- Danger registration experts become marginalized and their expertise lost

Examples of e-learning to provide solution to training and information retrieval

Pavel Kristianov Milenov

- European Union project designed to improve access to information about the Common Agricultural Policy
- Problem of complex source documents and frequent policy changes
- Creation of a Wiki-based knowledge system

Nicholas Frunzi

- ESRI virtual campus designed to train software users.
- Access to free training material helps marketing the software

Some conclusions from the discussion groups

- Strong preference by students for face-to-face tuition and amongst providers who advocate e-learning – preference for blended learning experience and not "pure" e-learning

- No clear answer to the question as to whether better results from using e-learning compared with traditional educational methods

- Need to develop capacity - potential for e-learning because can provide "just-in-time" and "just enough" training

Further conditions

- Need to avoid instructivism – education and development of individual not training – creation of learning reinvention centre
- Avoid digitising past practices – develop new ways suited to a new environment
- Should e-learning should be synchronous or asynchronous – easier not to synchronise
- Large number of good prototypes but rolling out them out is far from guaranteed
- Need for partnerships between universities and between academia and industry
- Potential role for FIG as a facilitator

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Constraints on e-learning

- Access to hardware
- Reliability of electricity supplies
- Number of trainers
- Cost of software and licenses, especially of proprietary systems
- Financial and resource costs of developing appropriate material
- Linguistic barrier that results from the dominance of the web by the English language