FIG COMMISSION 2

Professional Education

Newsletter

January 2010

Looking back and beyond 2010

The Commission 2 Work Plan 2007-2010 based on the experiences of the previous period tried to fulfil and implement the FIG Council recent Work Plan. During the previous three years Commission 2 focused on the following key areas:

- o to organize annual workshops on actual topics related to education and training
- to investigate the use of information and communication technology to support networked professional education
- to organise events, jointly with other Commissions, for solving problems, filling educational gaps and for building communities within young professionals.

The main events and activities of the past period are summarized in the first part the newsletter. The second part gives a brief overview of the preparations for the FIG Congress and the Annual Commission 2 workshop (26-28 August 2010 London, UK).

Working Week 2007

12-17 May, 2007 Hong Kong SAR, China

On the Annual Meeting the work plan was introduced and accepted by the General Assembly. A "Round Table on Education in Asia and the Pacific" and the "Meeting of FIG Academic Members" supported tuning the work plan, helping the needs analysis. During the WW six technical sessions were organized by Commission 2. After the review 21 presentations were accepted. The main topics were: Curriculum Development, e- Learning and Knowledge Management, Building a Sustainable Future, Marketing and Sustainability in Education, The Future of Surveyors.

Scientia Est Potentia

7-9 June, 2007 Prague, Czech Republic



The FIG Symposium on Curriculum Development with the motto of Scientia Est Potentia (Knowledge is Power) was organized in Prague, in the cooperation with the Faculty of Civil Engineering at CTU and Commission 2. The Organizing Committee was chaired by Aleš Čepek, Czech Technical University (CTU). The main purpose of meeting was to initiate discussions between Working Group 2.1 - Curriculum Development members, to introduce their experiences.

The papers were blindly reviewed by 2 scientific committee members. All the accepted contributions (full papers) were published in the proceedings volume (ISBN 978-80-01-03718-8) and on the website. 21 presentations were given in nine sessions during the symposium.

Professor Stig Enemark (Aalborg University) in his keynote presentation encouraged the interaction between education, research and professional practice, underlying the importance of curriculum development as the key to the future. The speakers represented 11 countries. There was a brainstorming session to define a "core knowledge base" for surveying education moderated by Ann Johnson (ESRI).

Commission 2 website

www.geo.info.hu/fig2/



In June 2007 a website was introduced as a communication tool to strengthen knowledge sharing, community building between the delegates, academic members and other parties interested in the FIG Commission 2 activities. The registration is controlled by the Commission chair and WG leaders. The acceptance of the registration gives access not only for viewing, but also for publishing of news, important events in the event calendar, articles, presentations, photos, and it gives also possibility to take part actively in the forum of needs analysis and many other topics.

e-Learning: Sharing Good Practices

11-13 June 2008 Enschede, The Netherlands

The International Workshop was initiated by Liza Groenendijk (chair of WG 2.2) and jointly organised by Commission 2, Commission 7 and the International Institute for Geo-information Science and Earth Observation (ITC). The workshop aimed to bring together professionals engaged in e-Learning in Surveying, Geoinformation Sciences and Land Administration. The workshop was an active event, offering the participants the opportunity to demonstrate and/or try out good practices and to share their experiences. The FIG rules were applied for reviewing papers. The full papers are available at FIG website, the presentations could be downloaded from http://www.itc.nl/fig_elearning2008/.

The number of participants was around 100. The workshop was opened by Prof. Martien Molenaar, Rector of ITC. Keynote speakers were Prof. Stig Enemark, President of FIG (Session through Video Conferencing); Nicholas Frunzi, Director of Educational Services, ESRI, USA; Prof. Paul van der Molen, Vice President of FIG, ITC, The Netherlands; Prof. Bela Markus Chair FIG Commission 2, UWH, Hungary; András Osskó, Chair FIG Commission 7, Budapest Land Office, Hungary. In addition to the presentations, hands-on workshop sessions were organized. Participants discussed relevant topics in four home groups.



Working Week 2008: Integrating generations

14-19 June 2008 Stockholm, Sweden

The Working Week addressed many of the issues facing both professional surveyors and educators in the next years. These include questions related to the need of getting young people interested in surveying and geomatics, what is the role of modern technology in professional education and training, how to keep the professional qualifications up to date, need for capacity building – all issues of great interest for FIG and the organisers. During the Working Week three technical sessions were organized by Commission 2. After the review of the abstracts, 21 presentations were accepted and 17 papers presented. The main topics were: Curriculum Development, Educational Case Studies and Educational Projects. Commission 2 co-operated with other Commissions in two additional Technical Sessions: TS 2F - Young Surveyors and TS 3G – Capacity Building.

Summer School on Urban 3D modelling

23-29 August 2008 Szekesfehervar, Hungary



The Summer School aimed to give an overview of data acquisition, data processing and modelling methods related to 3D modelling in urban environments. 40 students attended from abroad and 10 from Hungary. For 27 August 2008, a one-day conference has been arranged in order to give a top quality overview on new methodologies in data collection and modelling.

The venue was the UWH GEO's Knowledge Center on Land and Geoinformation. Lectures delivered by leading representatives of the 3D arena including Eurosense, LEICA, Varinex, Burken Laservision, YonaPMS, András Osskó, the chair of FIG Commission 7 as well as Prof. Franz Leberl, chief scientist of Microsoft' Virtual Earth program.

The event was free to the public thanks to the prominent donor organisations. Major sponsor of the conference was Microsoft. More information and the recorded presentations are available at the website: http://www.geo.info.hu/urban3d/

Navigating the Future of Surveying Education

26-28 February 2009, Vienna, Austria



FIG-Commission 2, in particular Working Group 2.3, and the Austrian Society for Surveying and Geoinformation (OVG) organized a workshop under the title "Navigating the Future of Surveying Education". The venue of this conference was the main building of the Austrian Federal Office of Metrology and Surveying (BEV) in Vienna. The local organizing Committee chaired by Gert Steinkellner (chair of WG 2.3) & Dr. Reinfried Mansberger.

The workshop program included the opening session, two keynote sessions with five keynote speeches, eight technical sessions with 28 presentations, two workshop sessions and the closing session. 74 participants from 20 countries attended the conference. Keynote speeches were given by the President of FIG, Professor Stig Enemark, by the Director of Higher Education of ESRI, Michael Gould, by the Incoming Chair of FIG Commission 2, Steve Frank, by the Rector of the University of Technology Graz, Professor Hans Sünkel, and by the Austrian Representative of the Bologna Follow Up Group, Gottfried Bacher.

It was recognized that there is requirement to deliver a broader skill sets in academic education to meet the challenges of the paradigm shift in the surveying profession that could be entitled "From Measurement to Management" and to face the rapid technology development and changing demographics. But it was also recognized that profession needs a coherent marketing and communications strategy in place to propagate the attractiveness of the profession and to ensure that members have access to all available resources to keep their skills and knowledge up to date. The conference agreed that students and young surveyors should particularly be involved in surveying awareness and marketing initiatives, and they should help to address any 'image' problems surveying may have across regions. Workshop presentations and papers are available on: www.fig.net/commission2/vienna_2009_proc

Working Week 2009: Surveyors Key Role in Accelerated Development 3-8 May, 2009 Eilat, Israel

The Working Week targeted many of the issues facing both our profession and educators in the next years. The main topics addressed by Commission 2 include the importance of changes in land surveyors education, the future directions of education to meet the challenges and opportunities, the role of surveying within the university curricula in general, outcome-based approach to teaching, learning and assessment, development of curricula and educational materials, the need of getting young people interested in surveying and geomatics, marketing of education, challenges and opportunities in learning management.

During the Working Week three technical sessions were organized by Commission 2. After the review of the abstracts, 12 presentations were accepted and presented. The main topics were: Needs of Changing Society – New Skills, Competences in Surveying, Good Educational Practices, Life-long Learning – Educational and Training Services.

7th Regional Conference: Spatial Data Serving People: Land Governance and the Environment - Building the Capacity 19-22 October 2009, Hanoi Vietnam

At the Regional Conference our main focus were on "Education and training needs and responses" and "Capacity building". During the Conference two technical sessions were organized by Commission 2. After the review of the abstracts, 8 presentations were accepted and presented on various topics (exchange programs, geomatics education: as a rising sector for value addition, building the capacities in the cadastral and land registration organizations at individual level in developing and transition countries, etc). ITC presented a Worldwide Network of Academic Partners; a Mechanism for Improving Capacity Building in Land Administration.

There was a "Roundtable on Professional Education", where Dr. Steven Frank, chair elect Commission 2 (USA): presented his Work Plan for the period of 2011-2014. The ideas were discussed during the roundtable session.

Preparations for Sydney

Enhancing Surveying Education through e-Learning

A publication of FIG Commission 2 – Professional Education

At the "Navigating the Future of Surveying Education" workshop in Vienna (February 2009), the board of working group chairs of Commission 2 decided to summarize the experiences on e-Learning in a technical report. As chair of Working Group 2.2 Liza Groenendijk was invited to guide this process and be responsible for the editing.

The technical report on e-learning intends to summarize the outcomes of symposia and workshops organised by FIG Commission 2, and aims to develop and present an FIG Policy Statement on e-learning. The intention of the report is to support FIG members and their affiliates, and the surveying public in general, in their efforts to further develop e-learning initiatives within their organisations.

The preparations for the technical report started early March 2009. A team of Commission 2 members drafted a first proposal and invited relevant e-learning specialists from universities and industry to join. To facilitate the writing process a Wiki environment (http://figpub.pbworks.com/) was created for drafting the publication and Skype was promoted as the tool for online meetings.







By the end of 2009 the publication was sent to the FIG Council. The Technical Report will be presented during the FIG Congress in 2010 in Sydney. It is available to download from: http://www.fig.net/pub/figpub/pub46/figpub46.pdf

FIG Congress Sydney 2010: Facing the Challenges – Building the Capacity 11 - 16 April, 2010 Sydney, Australia



During the Congress the following ten Technical Sessions will be organized by Commission 2:

TS 1G - Professional Management and Education

TS 2G - Future Education Models and Curricula

TS 3G - Surveying Education Curricula I

TS 4G - Surveying Education Curricula II

TS 5G - Education Pedagogy in Surveying

TS 6G - e-Learning I

TS 7G - e-Learning II

TS 8G - Educational Needs

TS 9G - Quality in Surveying Education

TS 10G - Knowledge Sharing

and two other sessions will be supported by us:

TS 7H - Young Surveyors Network - Attracting New Generations

FS 2G - Round Table on Knowledge Transfer and Attracting Young People to Surveying - Jointly Organised with ASIERA

Looking forward to meeting you in Sydney.

Commission 2 Work Plan 2011-2014

The FIG Congress changes every four years after the FIG Congress meetings. The next change will be in January 2011. At this point a new FIG President and FIG Commission Chairs will take office. Prior to commission chairs taking office, they are elected to a two-year term as Chair-elect during which time each of the FIG Commission Dr. Steven Frank was elected by the General Assembly in Stockholm as chair of Commission 2 for 2011 – 2014. Chair-elects is charged with reviewing and updating their commission work for the coming four year cycle.

The proposed Commission 2 Work Plan will build on the work of previous terms of Commission 2. It will continue the work on e-learning, work with identifying core survey knowledge, work with building capacity in surveying education, promote opportunities for Young Surveyors, promote FIG Academic Membership, work with educational management and marketing, and identify educational standards and accreditation procedures.

The preliminary work plan identifies four proposed working groups. Each of the working groups represents an area of focus in professional surveying education. We are also proposing the development of four workshops, one for each of the working groups. The workshops are proposed to be held annually with tentative locations set in Europe and the United States. Preliminary discussions have been held with

potential chairs of two of the working groups. Names of other potential working group chairs have been discussed. Persons interested in chairing or working on any of the working groups should contact Steve Frank.

The final work plans will be adopted at the 2011 Working Week in Morocco. The Commission 2 Work Plan will be fully developed at that point with input from a variety of sources within FIG and from other relevant parties.

Mission statement

Promoting good practices in professional surveying education:

- Exploring the needs of society and endorsing universities and other educational organizations to develop mechanisms and processes that will help to meet those needs
- o Supporting and promoting advances in survey education through identification of core surveying knowledge
- Promoting cooperative ventures in surveying education and research
- Support the building of capacity for surveying education in the developing world
- Reinforcing contacts to educational commissions of related professions
- Improving dissemination of information on all of the above

The mission will be realized by the following Working Groups:

Working Group 2.1 - Curriculum and Core Survey Knowledge Professional surveying involves use of rapidly changing technology. Yet core theory and practice of surveying remain almost constant. Identifying and sharing core survey knowledge and practice will help to understand curriculum needs for a consistent and interchangeable education for professional surveyors.

Working Group 2.2 – Learning and Teaching Methodology Like surveying itself, learning and teaching of surveying can also involve the use of rapidly changing technology. Indentifying and sharing best practices in e-learning and other educational methodologies plays an important task in the universal continuous development of the surveying profession.

Working Group 2.3 – Marketing and Management of Professional Survey Education

Some parts of the world exhibit a declining interest by potential professionals in surveying education. Other parts of the world have an interest but few opportunities to pursue surveying education. Commercial aspects of education must be recognized but opportunities for cooperation between educational organizations and a logical, universal approach to promote professional survey education need be developed and shared.

Working Group 2.4 – Accreditation and Quality Assurance The Bologna Process in Europe and NAFTA in North American show a trend to cross-border assurances of quality in professional survey education. Academic accreditation of surveying education programs is growing internationally through organizations such as ABET. The promotion of quality survey education that can meet international needs will promote a universal understanding of the role that surveyors have in developing a sustainable and vibrant living environment for society.

Next event

New challenges in Professional Education

26-28 August 2010, London, UK

The aims of this workshop are the presentation of the results of Working Groups for 2007 – 2010; discussions on the present problems of surveying education; and planning actions for next term (2011-2014). More information: http://www.uel.ac.uk/fig/. Contact: Sharon G. Brown, University of East-London (S.G.Brown@uel.ac.uk)

Important dates:

Submission of abstract (approx 1500 words): 30th April

Notification to authors: 14 May

Full paper submission (max 10 pages): 01 June

Early registration: 21 June

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