

**Report to the 25th General Assembly
FIG Congress in Washington, 19-26 April 2002**

**FIG COMMISSION 2
PROFESSIONAL EDUCATION
REPORT ON ACTIVITIES 1998 – 2002**

1. INTRODUCTION

The activities of Commission 2 during the period 1998 – 2002 can be classified into the following groups:

- Seminars organized by the Commission
- Presentations given in the technical Programs of Working weeks
- Commission work during the Working Weeks
- Working Group activities
- Development of Surveying Educational Database and Surveying Educational Portal
- Information delivery by Newsletters and Web site.

During the past period Commission 2 has got an active and productive core group that also represents very well FIG members all around the world. One of the goals in the Commission work has been to be as global as possible and for example organize seminars and symposia not only in Europe and US but also in Asia, Africa and Latin America. In that goal we have been very successful. Another goal has been to try to activate young surveyors and students in the Commission work. Also in this we have got some success. Commission meetings have been very lively and not only “inside”, “old boys club” meetings but attracted also young representatives. Until this the best meetings we had in Seoul where the Commission got very good impact from members and could fix the last targets for the end of this period.

The most concrete achievements have been made among the issue of Virtual Academy, not only by the Working Group 2.2 but also together with other Working Groups. Virtual Academy seems to be a topic that integrates the goals and also the activities of Commission 2. For example the work of Working Group 2.3 on Curricula and Working group 2.4 on Surveying Students is very relevant in developing global Virtual Academy for Surveyors. The last project in Commission 2 has been the prototype on Surveying Educational Portal in web. In that project both Working groups 2.2 and 2.3 have been active.

Commission 2 has been working together especially with Commission 1 and the Task Force for Underrepresented Groups in Surveying. In Commission work we have always tried to encourage young and female representatives as well as non-native English speakers.

In the following sections the mentioned topics are briefly reported.

2. WORK PLAN FOR 1998 –2002 AND THE WORKING GROUPS

In the work plan for 1998 – 2002 the terms of reference emphasized the following topics to be treated in Commission 2 work:

- Education and teaching methods
- Continuing professional development
- The interaction between education, research and practise
- Encouragement of the exchange of students and personnel.

Because the resources of a Commission are always limited we decided to try to integrate the previous topics. Very soon it was evident that Continuing Professional Development and Education and Teaching Methods have grown into a new existence, Virtual Academy. Virtual Academy seemed to be the frame in which both the problems of learning methodology as well as learning material could be presented. Thus Virtual Academy together with the topic of Surveyors Curricula became the driving themes.

Virtual academy is an attempting topic, modern and attracting, using the latest technology. Prototypes and ready-made products exist all over the world. However, VA is just an empty shell without the definition of the educational contents. Surveyors' curricula have been a difficult topic – starting from the times of the first Allan's report up to the latest work in CLGE. The final consensus seems to be that it is impossible to define strictly any curriculum, not even the core curriculum. We have to let all universities in different countries be independent and individual and develop their curriculum according to the local needs. However, in Commission 2 we have had an idea about an Internet based tools for describing curricula and using the modern technology in information search?

In the work plan four Working Groups were established, one of them being continuation from the previous period:

WG 2.1: Management skills, professional competencies and CPD policies.

Chair: Chris Hoogsteden (NZ).

The main goal of this WG was to conclude the work from the previous period.

WG 2.2: Virtual Academy – Distance learning.

Chair: Henrik Haggrén (FIN), co-chair Esben Munk Sørensen (DK)

This WG aims in collecting experiences on virtual academy projects and disseminate the information to universities who are starting to introduce this technique. The WG is also developing a home page with links to Web Sites for distance learning relevant to surveying education. This goal has developed during the period into the concept of Surveying Educational Portal.

WG 2.3: University Curricula – Content Competencies, trends and Assessments.

Chair: Jud Rouch (US)

The initiative goal was to collect information on surveying curricula all over the world – later on the goal was refined as “to develop a method for describing and comparing different curricula”. This goal has now been integrated with the Virtual Academy work on Surveying Educational Portal.

WG 2.4 Surveying Students.

Chair: Pedro Cavero (SP), Vice Chair of Commission 2

The main task of this WG is to try to encourage the students and young surveyors contribution in FIG by disseminating information on FIG and trying to provide possibilities for students to participate into Congresses and Symposia.

It has also to be mentioned that a joint Working Group with Commission 9 was established on Education of Valuers in Prague. The chair of that WG is Professor Kauko Viitanen (FIN).

3. SEMINARS ORGANIZED BY THE COMMISSION 2

Commission 2 has organized three seminars, in Wuhan (P.R. of China), Rosario (Argentina), Espoo (Finland).

FIG COMMISSION 2 SEMINAR, 14.-16.October, 1998, Wuhan, P.R.China “University Curricula, Teaching Method, Quality Assurance”

2 Seminar at Wuhan Technical University of Surveying and Mapping was held in October 14-16, 1998. The seminar was organized by Professor Liu Yanfang from Wuhan Technical University. The seminar is part of the work in **Commission 2 Working Group 3**. The seminar included two working days as well as dinner and evening party hosted by the university.

In the opening ceremony Chinese representatives gave their kind welcoming words: Rector of the University Professor Li Deren, Professor Liu Yanfang, Chairman of the Educational Committee of Chinese Society of Surveying and Mapping Mr Ning Jinsheng, Director of Educational Affairs at the National Bureau of Surveying and Mapping Professor Liu Xiaobo.

The main topics of the seminar, both in presentations and in lively discussions, were:

- lifelong continuous learning
- management of change in a surveyors' professional life
- quality of education as well as
- computer assisted learning.

In the seminar program 11 oral presentations were given selected out of 38 which were printed in the Proceedings.

FIG COMMISSION 2 SEMINAR, 18.-20. October 2000, Rosario, Argentina “The Latin American Surveyor before the Third Millennium: Education and Professionalism”

One of the objectives of the FIG USA Bureau has been to expand the Federation in Latin American countries, where at present there are only two members. The Vice Chair Pedro Cavero has made a lot in communicating with Latin American countries. The Rosario Symposium was also organized by Professor Pedro Cavero together with the local organizers.

The sessions were held in the Rivadavia Center, in down town Rosario, where a small exhibition was organized as well.

There were 128 participants from 10 different countries (from Canada to Australia, as well as Malaysia, Denmark, Spain, Chile, Uruguay, Paraguay, Puerto Rico and of course, Argentina.), which significantly exceeded the most optimistic expectations.

The opening ceremony was chaired by the Dean of the Faculty, representing the Rector of the University, who was on a trip abroad, and included speeches from Presidents of both

provincial Associations and President of the National Association and the Vicechairman of FIG Commission 2, who read messages from Mr. Foster, President of FIG, and Prof. Virrantaus, Chair of Commission 2. A light lunch was provided by the Associations.

**FIG COMMISSION 2 SEMINAR 5.-8.June, 2001, Otaniemi, Finland
“Seminar on Virtual Academy”**

The working group on **Virtual Academy, WG 2.2** organized a seminar that took place in Finland, Espoo, Helsinki University of Technology. Professor Henrik Haggren together with Mrs. Marjaana Laurema organized the seminar. The seminar was in two parts: the first part was a workshop and the latter part was a seminar. Fifteen participants attended to both parts. It was decided that WG 2.2 and WG 2.3 together will prepare the first prototype of the Portal on Surveyors Education in the Web before Washington Congress.

The program included several presentations and demonstrations on virtual academy applications. Also a video conference was organized between Otaniemi and Melbourne. Esben Munk Sørensen, Aalborg and Gary Hunter, Melbourne, Australia organized a distance learning session.

4. TECHNICAL PROGRAM AND COMMISSION MEETINGS DURING THE FIG WORKING WEEKS

In the following a summary of the contribution of Commission 2 during the FIG Working Weeks in Sun City (1999), Prague (2000) and Seoul (2001).

In SunCity South Africa, 30 May – 3 June, 1999

Commission 2 organized 3 technical sessions with 9 presentations. One commission meeting was held.

Prague, Czech Republic, 21 May – 26 May, 2000

Commission 2 organized 1 technical session with 5 presentations. One commission meeting was held with 14 participants. Also an open meeting on Virtual Academy was organized.

Seoul, South Korea, May 2001

Commission 2 organized 3 technical sessions with 10 presentations. Two commission meetings was held with 14 and 24 participants.

Commission 2 has also participated in the following symposia:

Commission 5 seminar, September 2000 in Malta with four presentations.

XVII North Americal Surveying/Geomatics Teachers Conference, July 10-14, 1999, Purdue University.

CLGE meetings in Oulu (Finland) and Delft (The Netherlands).

5. WASHINGTON FIG CONGRESS

Commission 2 will organize 8 technical sessions with 31 presentations in Washington FIG Congress. The themes of the sessions are as follows:

- Virtual Academy – Case Studies and Experiences

- Virtual Academy and Curricula Contents
- Teaching and Learning Methods
- Virtual Academy and New Teaching and Learning Methods
- Surveying Core Curricula
- Changes in Curricula
- Descriptions of Curricula
- Different Aspects in Planning and Implementing Curricula.

In addition the these Commission 2 is involved in two joint sessions with Commission 9 on Education of Valuers and 2 sessions with Commissions 1 and The Task Force of Underrepresented Groups in Surveying. A commission meeting will also be organized. Working groups will report on their work.

6. DEVELOPMENT OF THE SURVEYING EDUCATIONAL DATABASE AND THE SURVEYING EDUCATIONAL PORTAL

Commission 2 has continued the development of the Surveying educational Database. First the database was implemented as a regular database and put into Web so that all universities could update their data by using a password. This work was initiated by Commission 2 and implemented by FIG office.

The last development on describing curricula has been the prototype of Surveying Educational Portal. The idea is to implement a Portal on FIG site open to all members of FIG and providing both descriptions of surveying curricula and educational materials and even virtual academy courses. In Washington Congress the first prototype is presented and the further plans can be made.

7. NEWSLETTERS AND WEB SITE

Commission has published two Newsletters per year. It has been set by regular mail into more than 40 national members and also all Newsletters have been published on the Commission web site.

The Commission web site has been maintained by Mrs. Arzu Coltekin at Helsinki University of Technology.

8. FUTURE PLANS AND ACKNOWLEDGEMENTS

The Vice Chair Professor Pedro Cavero (SP) will take the chair for the next period 2002–2006. Virtual Academy Working Group will continue by the leadership of Professor Henrik Haggrén (FIN).

There are many persons who should receive warmest thanks for their contribution to Commission 2 during the period 1998 – 2002. In addition to the Working Group Chairs, already mentioned by names, I want to thank Professor Stig Enemark for great support and devoted work, Professor John Parker, Chair of Commission 1 for great co-operation, Mrs. Gabriele Dasse for taking the leadership in the Task Force for Underrepresented Groups in Surveying – originally started by the Chair of Commission 2. I also want to thank Mrs. Marjaana Laurema, the Secretary of Commission 2, Mrs. Arzu Coltekin for volunteering work with Commission web site. And last but not least I want to thank the Vice Chair of

Commission 2, Professor Pedro Cavero for chairing the Commission with me and being a sound friend during the changing times - I wish the best luck and success to him and the Commission for the coming period.

Kirsi Virrantaus

Chair of FIG Commission 2, 1998-2002

E-mail: kirsi.virrantaus@hut.fi

10.2.2002