

# International Cartographic Association Commission on Education and Training

## Report to the Executive – ICC2011

Provided below is a summary of the main activities of the Commission on Education and Training for the period 2007-2011.

### ICA RESEARCH AGENDA

#### ICA Research Agenda – CET Contribution – Discussion Papers

The following paper was written for the ISPRS Commission VI, Mid Term Symposium, Enschede, June, 2010

#### THE ROLE OF INTERNATIONAL GEOMATICS ORGANISATIONS IN THE PROMOTION OF CONTINUING PROFESSIONAL DEVELOPMENT (CPD)

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The nature of CPD is considered: the process is modelled and each component is examined in the context of geomatics. Firstly, the type of person and institution interested in CPD (the consumer) is addressed. Secondly, there is a range of suppliers of CPD resources including commercial companies, educational establishments or international learned societies. Thirdly, the material delivered also forms part of the model: there a wide range of content, available material, and dissemination method.

The following refereed paper is to be presented at ICC2011 in Paris.

#### THE CHANGING FACE OF CARTOGRAPHIC EDUCATION AND TRAINING

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This paper discusses the issue faced by many cartographic departments and programs around the world. That is the weakening of cartography as a discipline in its own right and the dispersal of cartographic theory and practice into many and varied education programs representing allied disciplines.

#### ICC2009 & ICC2011 Conference papers from CET members

##### ICC2009

More than ten papers on cartographic education were presented at the ICC2009 conference in Chile and are now linked to the CET website:

- Araya Palacios Fabin Rodrigo: [Progress Map for Geography in Chile: Cartographic Materials in Primary And Secondary Schools](#)
  - Bielecka Elzbieta: Usability of Web Maps in Teaching Geoinformation in Higher Education
  - Brandalize Maria Cecilia: [The Pedagogical Experience in Teaching Cartography and GIS Using Public Data And Software](#)
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- Dibiase David-Goranson Christopher-Harvey Francis-Wright Dawn: [The GIS Professional Ethics Project](#)
- Fraser David: [The Model for The Development of Research Training in Asian Countries by a Foreign University - Case Study Vietnam](#)
- Krajukhin Alexander: New Technique of Creation Educational
- Medvedev Andrey: [Satellite Information: Innovations for School Education](#)
- Molochko Victoria: [The System of Educational Geographical Atlases in Ukraine](#)
- Murad-al-shaikh Makram: [Teaching Cartography Using Map Critique Exercises a Proposed Model for a GIS Cartography Course](#)
- Peters Stefan-Krisp Jukka-Liqiu Meng: [Development of an International Master Program in Cartography and Geoinformatics](#)
- Reinhardt Wolfgang: [Some Thoughts On a Body of Knowledge for Different Purposes in GI Education](#)
- Resl Richard: [UNIGIS in Latin America 1999 To 2009: Experiences of a Distance Education Program for GIS in Latin America](#)
- Van Der Merwe Fritz: [Concepts of Space in Spatial Thinking](#)
- Windiastuti Rizka: [Cartography Education for Children in Indonesia](#)
- Zentai Laszlo: [Change of the Meaning of the Term cartographer in the Last Some Ten Years](#)

### ICC2011

A similar number of papers of education and training have been submitted to ICC2011 and these will be linked to the CET website at the conclusion of the conference.

### Review of Cartographic Education and Training papers for ICC2009 Chile and ICC2011 France

The Commission reviewed the cartographic education and training papers presented for consideration for the ICC2009 conference.

The Commission reviewed the cartographic education and training papers presented for consideration for the ICC2011 conference. Commission members Dr. John Kostelnick and Dr Elisabeth Chesneau took on the role of reviewers.

## MEETINGS

### Commission meeting Prague

A face-to-face CET meeting was held in 2009 as part of the symposium on Cartography and Geoinformatics for Early Warning and Emergency Management.

The meeting was chaired by David Fraser and the following Commission members were present and contributed to the discussion:

Professor Laszlo Zentai (Hungary)  
Colonel Vaclav Talhofer (Czech Republic)  
Mr Sukendra Martha (Indonesia)

Other key attendees were:

Professor Milan Konecny (ICA immediate past president)  
Dr Temenoujka Bandrova (Co-chair Commission on Cartography and Children)  
Professor Ferjan Ormeling (ICA executive)  
Mr. Aris Poniman Kertopermono (Indonesia)

### Face-to-Face Commission meeting at the ICC2009 in Chile

The Commission on Education and Training held a face-to-face meeting during the ICC2009 conference in Chile. The Chair of the CET also contributed to the symposium, "The Future of Maps and the Internet" run prior to the conference on November 13 - 15, in Valparaiso, organised by the Maps and the Internet Commission.

## WORKSHOPS

### **Iran Workshop - 2009**

Thirty participants attended a three week hands-on Workshop on Cartography in Tehran, Iran. The workshop, held from 9th to 13th May 2009, was organised by the National Cartographic Center of Iran and the ICA Commission on Education and Training. The workshop was hosted by the National Cartographic Center (NCC), and in particular staff of the Cartography Department, NCC ICA delegate Mr. Babak Shamei, and the deputy manager of the Cartography Department, Mr. Mehrdad Jafari. Participants were primarily NCC staff involved in map production associated with the publishing of country maps, city maps, street directories and atlases. The workshop was presented by David Fraser and Colin Arrowsmith from Australia: László Zentai and Antal Guszlev from Hungary and David Forrest and Mike Shand from Great Britain.

### **Cartographic Workshops - 2010**

The ICA Commission on Education and Training used the cartography workshop held in Tehran as a model for further workshops. Communication with cartographic colleagues from member countries resulted in workshops in Indonesia and Vietnam in 2010. The workshop model was adapted and adopted to benefit cartographers in both these countries. Guidelines have been produced for the workshops. They can be found at the CET website <http://lazarus.elte.hu/cet/> under the "Cartographic Workshops" tab.

### **Workshop Vietnam 2010**

**VIET NAM – HO CHI MINH CITY WORKSHOP on 19th to 30th July.**

#### Workshop I: 19-23 July 2010

Presenters: Professor László Zentai (Hungary) and Professor RNDr. Vít Voženílek, CSc. (Czech Rep.)

#### Workshop II: 26-30 July 2010

Presenters: Professor William Cartwright (Australia) and Manuela Schmidt (Austria)

Many thanks go to the presenters for giving of their time, expertise, resources and finances (air fare) to attend this workshop.

### **Workshop - Indonesia 2010**

**INDONESIA - JAKARTA WORKSHOP on 26 July - 6 August 2010.**

The 5th IGTE symposium will be held on 27-30 July 2010 (workshop presenters for week 1 also presented at this event)

#### WEEK 1 (July - Monday 26th - Friday 30th)

Presenters: Professor Ferjan Ormeling (The Netherlands) and Dr Gang-Jun Liu (Australia)

#### WEEK 2 (August - Monday 2nd - Friday 6th)

Presenters: Professor William Cartwright (Australia) and Ms Manuela Schmidt (Austria)

Many thanks go to the presenters for giving of their time, expertise, resources and finances (air fare) to attend this workshop.

### **Symposium (workshop) – Paris 2011**

A workshop "*Maps for the future: Children, Education and the Internet*" has been organised for prior to the ICC2011 at the University of Orleans, June 30 – July 1. The Commission on Cartography and Children, the Commission on Education and Training, the Commission on Maps and the Internet and the Commission on Planetary Cartography along with the Working Group on Cartography for Early Warning and Crisis Management have been confirmed as partners. Dr. Jesus Reyes and Dr Laszlo Zentai are the key organising team.

## PUBLICATIONS

### Academic Papers

The webpage devoted to cartographic papers has been extended on the CET website. The following papers have been added to those already lodged:

A. Keogh-D. Fraser: [Contemporary Map Products and Their Origins](#)

Danielle Cull: [Applying Beck's tube map theories and conventions to non-geographic subject matter](#)

Monique Elsley: [The Issue of Accessibility: Considerations when Designing for a Worldwide Audience](#)

Harvey, Kate: [Google Earth - Has the "Digital Earth" been achieved?](#)

Pegg, Dave: [Design Issues with 3D Maps and the Need for 3D Cartographic Design Principles](#)

Syme, Richard: [Privacy of a mobile phone user in a rapidly evolving technological framework](#)

They can be found at the CET website <http://lazarus.elte.hu/cet/> under the "Academic papers" tab.

### CET newsletters

A regular newsletter (eCET) has been produced in 2009, 2010 and 2011. A copy has been sent to all CET commission members and other ICA commission and working group chairs. Back issues can be found at the CET website <http://lazarus.elte.hu/cet/newsletter/newsstart.htm>

### Cartographic Resources

A list of cartographic resources for those involved in cartographic education and training has been compiled and placed on the CET website <http://lazarus.elte.hu/cet/> under the "Cartographic Resources" tab. The list will grow over time as more resources are identified.

### ICA Newsletter – CET contributions

Reports were prepared for the ICA newsletters and they appear in each edition (See <http://icaci.org/newsletter>). A report was sent to Mr Igor Drecki for the June, 2011 edition.

### GIM Magazine Contributions

Articles have been produced for GIM magazine during 2007 -2011.

### CET Website

The Commission website is regularly updated by Professor László Zentai so that it remains up-to-date and relevant to members and the International community of cartographers.

## OTHER CONTRIBUTIONS

### Biennial Awards on Educational Cartography

#### 1. Aim

The competition aims to promote good practice in relation to the design and realisation of cartographic resources produced in an educational context.

*Le concours a pour objectif de promouvoir les bonnes pratiques pour la conception et la réalisation de ressources cartographiques dans un contexte éducationnel.*

#### 2. Eligibility

Submissions are invited for the competition in the form of maps, atlases and other educational cartographic resources designed to be used for either school students within the 3-18 age range or for tertiary undergraduate students. The term 'Educational cartographic resources' should be interpreted broadly to include, for example, conventional, web-based and digital materials, maps, globes and GIS. It shall not be restricted to published materials (enabling, for example, materials produced by cartography students and teachers to be included). *Materials that are primarily instructional in nature (i.e. textbooks on map skills) are not, however, included. Atlases are eligible.*

A document containing all the required detail has been amended and approved by the Executive. Ms Elisabeth Chesneau has translated the original English version into French. Both versions were

forwarded to the ICC2011 organising committee but a response was not forthcoming and the ICC2011 will be used as a test case only.

A copy of the awards document has been placed on the CET website [[http://lazarus.elte.hu/cet/.](http://lazarus.elte.hu/cet/)]

## **Cartography Island**

Cartography Island is a 'virtual' island in the Pacific.

On this island is placed information about different aspects of cartography.

Cartographers are invited to visit the island to obtain cartographic information.

Cartographers are also invited to contribute information which can make the island into a one stop geographical location where everyone could go to indulge their passion for cartography.

Cartography Island "themes" are listed at the information kiosk located at the island's airstrip.

Theme labelled map pins, distributed around Cartography Island, allow users to access selected cartographic information.

[Go to link:](http://lazarus.elte.hu/cet/cartography_island/island.htm)

[http://lazarus.elte.hu/cet/cartography\\_island/island.htm](http://lazarus.elte.hu/cet/cartography_island/island.htm)

## **Generic Guidelines for Continuing Professional Development**

The Continuing Professional Development program developed by the CET and rejected by the Executive at its last meeting, is to be revised to provide member nations with a generic set of guidelines, should they wish to develop a CPD program for their nation in the future. These guidelines will be placed on the CET website.

The CET still hopes that the original intent for the CPD program will one day be realised. That is, it was intended that the CPD program support and recognise the contributions to cartography of only a handful of individuals from developing countries who do not have access to the educational resources that most of us enjoy. It is not, and never was, intended to be used by those who have other means at their disposal to promote themselves as cartographers.

## **Generic Attributes of Cartographers**

The CET discussed the merit of developing a generic attributes list for cartography graduates. The initial set is presented below.

Cartography courses are designed to provide the community with scientist who have:

- > the ability to apply knowledge of basic cartographic fundamentals
- > the ability to communicate effectively, not only with other professionals, but also with the community at large
- > in-depth technical competence in at least one cartography sub-discipline
- > the ability to undertake cartographic problem identification, formulation and solution
- > the ability to function effectively as an individual and in multi-disciplinary and multicultural teams, with the capacity to be a leader or manager as well as an effective team member
- > an understanding of the principles of cartographic design and development
- > an understanding of professional and ethical responsibilities and commitment to them
- > an expectation of the need to undertake lifelong learning, and the ability to do so

## **FORWARD PLANNING**

### **Terms of Reference – 2007 to 2011**

- Work for reaching the general aims conceived in the ICA Statutes.
- Develop the existing ICA-sponsored Internet cartography teaching programme (modules), with regional workshops for training the teachers.
- Produce an ICA-sponsored Internet programme for continuing professional development, with regional workshops for training the teachers.
- Support cartography and cartographic education in developing nations by holding seminars in these nations.

- Promote integration by establishing linkage with the committees on education of sister surveying and mapping disciplines, by maintaining the list of institutions providing cartography course programmes, and interact as much as possible with other ICA commissions and working groups (organize joint meetings).
- Produce appropriate publications for dissemination of results of the above efforts and publish it in proceedings or on the CET website according to the IOF publication policy.
- Promote joint project cooperation between participating nations represented on the commission.
- Contribute to international forums where applicable.
- Develop mapping awareness competitions.
- Investigate the role of emerging technologies for use in education and training.

## **Professor László Zentai has produced a new set of TOR for the coming period 2011 - 2015.**

1. Work for reaching the general aims conceived in the ICA Statutes.
2. Support cartography and cartographic education in developing nations by holding seminars in these nations.
3. Develop the existing ICA-sponsored Internet cartography teaching programme (modules), with regional workshops for training the teachers.
4. Produce an ICA-sponsored Internet programme for continuing professional development, with regional workshops for training the teachers.
5. Produce appropriate publications for dissemination of results of the above efforts and publish it according to the IOF publication policy.
6. Promote integration by establishing linkage with the committees on education of sister surveying and mapping disciplines, by maintaining the list of institutions providing cartography course programmes, and interact as much as possible with other ICA commissions and working groups (organize joint meetings).
7. Improving dissemination of information on educational theory and practice of cartography to the members across the world.
8. Contribute to international forums where applicable.
9. Investigate the role of emerging technologies for use in education and training.
10. Develop mapping awareness competitions.

## **Succession Planning**

David Fraser will step down as Chair of the Commission on Education and Training at the ICC2011. If accepted by the Executive, László Zentai, Eötvös Loránd University, Pázmány Péter sétány 1/A H-1117 Budapest, Hungary, [laszlo.zentai@elte.hu](mailto:laszlo.zentai@elte.hu) will take over as chair for the next four year. I will assist him during this time as vice-chair.

### Compiled by:

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Chair, Commission on Education and Training

International Cartographic Association

<http://cartography.tuwien.ac.at/ica/>

Tuesday, 26 April 2011