

## **Biennial Report of the WFEO Committee on Capacity Building**

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The WFEO Committee on Capacity Building (CCB) has been very active since the General Assembly in Delhi, India in November 2007.

A delegation of WFEO participated in the UNESCO Commission on Sustainable Development (CSD-16) Session in New York City the first two weeks in May. Barry Grear, President; Dan Clinton, CCB; Darrel Danyluk, CEE; Jorge Spitalnik, CE; and Mike Sanio, ASCE represented WFEO, along with ICSU in the Science and Technology Major Group. The theme of CSD-16 was "Sustainability in Agriculture with sub-themes on Sustainable Agriculture Systems: Rural Development, and Land, Drought and Desertification; Africa; and Water and Hygiene. WFEO was able to provide engineering input to the discussions at the various sessions of CSD-16. This participation laid the groundwork for future WFEO contributions to UNESCO and the Commission on Sustainable Development.

The CCB supported the UPADI, WFEO, and WEC Meeting in Brasilia November –December 2008. At the UPADI Opening Plenary and Technical Council meetings, ASCE President Wayne Klotz, ASME President Tom Barlow, NSPE President Sam Grossman and US National Academy of Engineering Foreign Secretary, George Bugliarello, participated on key panels.

Presentations arranged by CCB during the UPADI Plenary included:

- Physical Integration: Vision and Concepts – Wayne Klotz, ASCE President
- Megacities – Dr. George Bugliarello, Foreign Secretary US National Academy
- The Future of Urban and Regional Mobility – Miriam Heller, ASCE SD Committee
- Continuing and Distance Education – Tom Barlow, ASME President
- Engineering Without Borders – Sam Grossman, NSPE President
- Energy: Integration and Cooperation Models – Kris Nielsen, Pegasus Global
- Free Trade Agreements; NAFTA and MERCOSUL – Reginald Vachon, Chair, Joint NSPE/ASME/ASCE Taskforce.

The WFEO-CCB co-organized and actively participated in several jointly sponsored technical meetings.

With ASCE International Activities Committee support under the leadership of Cliff Schexnayder and ASME member Bill Wepfer, Department Head of Mechanical Engineering at Georgia Tech, and Chair UPADI Education Committee, a powerful one-day Capacity Building/Continuing Education/Professional Development program was delivered at WEC 2008 on December 4, 2008: ***Opportunities in Engineering Capacity Building through Professional Societies: Engineering Education, Continuing Education, and Licensing.***

The Session was opened by the US Chair of the WFEO Capacity Building Committee Dan Clinton with presentations by Andrew Cleland, IPENZ, New Zealand, and Dawie Botha, SAICE, South Africa, describing the "Capacity Development Guide Book;" Meg Van Sriver, Engineers Without Borders; Victor Miranda, Belize; and Lina Sergie, Syria.

The panel was followed by a session – Continuing Education and Professional Development moderated by: Reginald Vachon, Chair Joint NSPE/ASME/ASCE UPADI Taskforce with presentations by Wayne Klotz, ASCE President, Tom Barlow, ASME President, and Sanjeev Kumar, Chair, Committee on Continuing Education of ASCE.

The third session, moderated by Dan Clinton, included Daniel Marcek, Engineering for the Americas; Marcelo De la Rosa, Vice President Louis Berger Group; and Dr. Peter Greenwood, Engineers Australia, on global accreditation and “Licensure: a Benefit or Challenge for Developing Countries.”

The final panel – Bridging the Gap between Industry and Academia, moderated by Reginald Vachon, had presentations by Sam Grossman, NSPE President, and Dr. Janaka Ruwanpura, Civil Engineering Department, University of Calgary, Canada.

The day long session was well attended (approximately 100 attendees) with good Question and Answer participation following each of the presentations. We received numerous compliments on the caliber of the program, the speakers, and the overall content.

The Capacity Building Committee met and developed a skeletal Strategic Plan for the next three years. The Strategic Plan included:

1. Develop and promote the Capacity Building Guidebook.
  - a. Define best practices to build capacity.
  - b. Identify needs of regions and special situations.
  - c. Define available funding for capacity building.
2. Create consistent language to define capacity building within funding structures and with decision makers.
3. Build strategic partnerships.
4. Provide a home to existing programs.
5. Communicate to others within WFEO what CCB is doing.

The Capacity Building Guide Book workshop, under the leadership of Dawie Botha and Andrew Cleland was able to develop a skeleton of the Guide Book. The draft skeleton has the following chapters.

1. Introduction
2. Principles of Capacity Building
3. Defining Needs and Desires in Participating Communities
4. Influencing/Defining Public Policy
5. Developing Educational Programs
6. Achieving Significant Participation in Education
7. Building Networks and Support Systems
8. Technical and Business Standards
9. Project Execution through Lifecycle
10. Gaining and Using External Funding
11. Special Issues

A rough draft was completed after Christmas and has been distributed with chapters assigned for fleshing out in the next several months. We plan to have an edited version of the first draft ready

by the end of April for circulation to other participants and contributors. From there we plan to edit and have a final version ready for roll out and promotion in Kuwait.

A WFEO delegation will again participate in the United Nations Commission on Sustainability-Session 17 in New York City the first two weeks in May. Dan Clinton, CCB, along with Barry Gear, President; Darrel Danyluk, CEE; Jorge Spitalnik, CE; Mike Sanio, ASCE; and Mike Michaud, ASME will be attending .The theme of CSD-17 is “Sustainability in Agriculture: Words into Action.” The WFEO delegation is hosting a 2-hour side event on Capacity Building – Worlds Into Actions (what it means, opportunities, barriers, solutions). We will also be developing a strategy for active participation at CSD-18 May 2010, the theme is: ***Chemicals, Mining, the Ten Year Framework of Programs on Sustainable Consumption and Production Patterns, Transport and Waste Management.***

The Capacity Building Committee has agreed to support a new Task Group “Capacity Building – Younger Engineers” under the leadership of Anntonette Joseph, Eng. Zainab S. Lari Computer Kuwait Society Of Engineers; Engineers Australia; Tim Monkedeick, Association of German Engineers (VDI) ; and Jennifer DeBoer, Student Platform for Engineering Education Development (SPEED). At the Kuwait General Assembly in November 2009, they will be formalizing the organization, and developing their goals and strategies for future programs.