ITC capacity development 2.0

Fostering more collaboration

Tom (A) Veldkamp
Dean ITC
09/11/15 Mexico City
ITC CHANGES OF NAME OF INSTITUTE

1950 International Training Centre for Aerial Survey, ITC
1968 International Institute for Aerial Survey and Earth Sciences, ITC
1985 International Institute for Aerospace Survey and Earth Sciences, ITC
2002 International Institute for Geo-Information Science and Earth Observation, ITC
2010 Faculty of Geo-Information Science and Earth Observation, ITC of the University of Twente
2015 ITC 65 year old!! Should we retire??
Combined ITC and UNIVERSITY OF TWENTE.

OVER 40,000 ALUMNI ACROSS THE WORLD
From Capacity building to capacity development

- In the field of earth observation there are:
  - new agendas
  - new actors
  - new thinking
  - new technologies
  - new possibilities

They offer us new opportunities
New vision
ITC 2020: more space for global development

- ITC’s *mission* is to develop Global capacity, particularly in less developed countries, and to utilize geospatial solutions to deal with national and global problems.

- Remote Sensing in part of the innovative geospatial technology domain
Our vision is that spatial solutions will play an increasingly important role in meeting many of mankind’s complex challenges (often wicked problems), such as climate change, population growth, and related claims for sufficient and secure food, water, energy, health, land and housing provision.

Therefore, our goal is to enhance our standing as an internationally recognized knowledge hub in the spatial domain, renowned for its collaborative educational and research activities, particularly in the global South.
Capacity Development in Earth Observation

- For ITC, capacity development implies building capacity in domain-specific knowledge, skills and attitude at the **individual** and **institutional/societal** levels.

- ITC therefore aims to achieve both individual and collaborative capacity building. This development reflects what happens in modern societies with a strong private sector.
Collaborative capacity building

- Since its inception in 1950, ITC has developed a broad global network of partners, and it wants to continue to actively pursue and elaborate our international partnerships within our knowledge domains.
- The ambition of ITC is *to become a knowledge exchange hub in its knowledge domain*. This requires the faculty to play an internationally recognized leading and coordinating role both globally and regionally.
- Our intention is to organize this together with other supra-national regional partners.
Collaborative capacity building: actions

Actions based on new vision:

- We consider it relevant to align our activities with those of other main players in our field.
- Active engagement with our Alumni network
- ITC will organize site event on capacity development during GEO meeting
Individual capacity building

Students are changing

Communicate many hours each day with ‘new’ social media in E-environment

Are getting used to instant access to information and support

Have become more entrepreneurial

"You have to solve this problem by yourself. You can't call tech support."

"There aren't any icons to click. It's a chalk board."

"I got an A in my business class. I outsourced my homework to a kid overseas."

UNIVERSITY OF TWENTE.
Individual capacity building

Education is changing

- more long life oriented
- more student (skill) focused, less content oriented
- more room for individual development
- more self-reliance and self-learning
- more E-learning
- Shift towards blended learning
Individual capacity building

New societal demands

Therefore new MSc program at ITC with:
focus on broad multi-disciplinary skill development

Spatial Engineering
a new MSc programme

The MSc in Spatial Engineering builds upon the expertise of the University of Twente in fields like civil and geo-engineering, computer science, geo-information science and earth observation, and public administration. This new master programme is planned to start in September 2016.

Hands-on, international and high-tech
Powerful forces, such as climate change and population pressure, pose huge challenges to governments. Spatial Engineering is a new two-year MSc programme that will equip you to make a contribution in this international arena. Working with the latest high-resolution satellite imagery and drone-based field observations of ongoing projects, you will become an expert in spatial modelling techniques for flooding, drought and earthquakes.
You will work in a team to design engineering and planning solutions. During a visit to an international project area in Africa or Asia you will discuss your team results with local institutions. The feedback you receive from consultancy and government professionals will increase your awareness and prepare you further for your career. Throughout the programme you will benefit from our expertise in civil and geo-engineering, computer science, geo-information science and earth observation, and public administration.
Our Earth Observation Knowledge domain is getting connected to society and other Geo technologies.

Rapid acceptance and users of geospatial data applications and technologies.

Robo-fly, developed at Harvard, weight < 1g.
Geospatial value chains

- For example cell phone app’s
  - Navigation systems

- Environmental agency
  - NGO’s

- We often lack companies to effectively fill in the gaps!!

- The need a global open data policy!!
Regional training networks where ITC acts as a knowledge broker
ITC will align its research and education to observed needs in our target regions
ITC will develop state of the art education (blended learning) that will train the future generation of Geo-information and Earth Observation
ITC MSc and PhD programs will fulfill real societal demands and appeal to the individual
ITC will focus on the ‘last mile’ in order to embed Earth Observation firmly in society
ITC will train students in entrepreneurial skills and support setting up their own business as professional
Thank you!