

E-learning at ITC

Project group E-learning ITC
Ineke ten Dam



Main items



- What is ITC?
- Why e-learning at ITC?
- Multi-usable courseware
- How far is ITC?
- DE design principles
- Examples of DE course materials
- How further?

ITC



- Institute for international education
- Capacity building in LDC countries

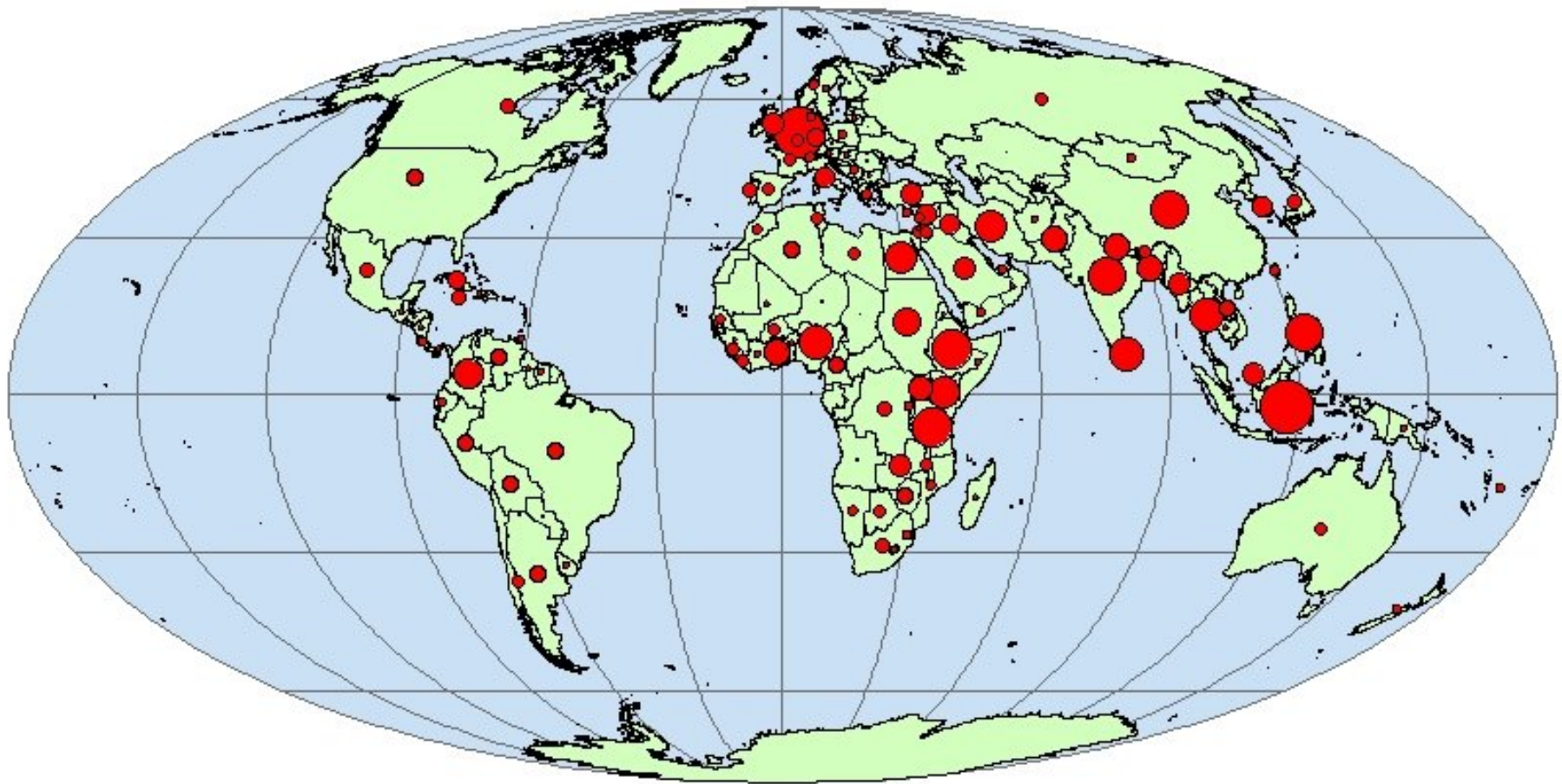
- Education (50-60%)
- Research
- Projects

Course levels



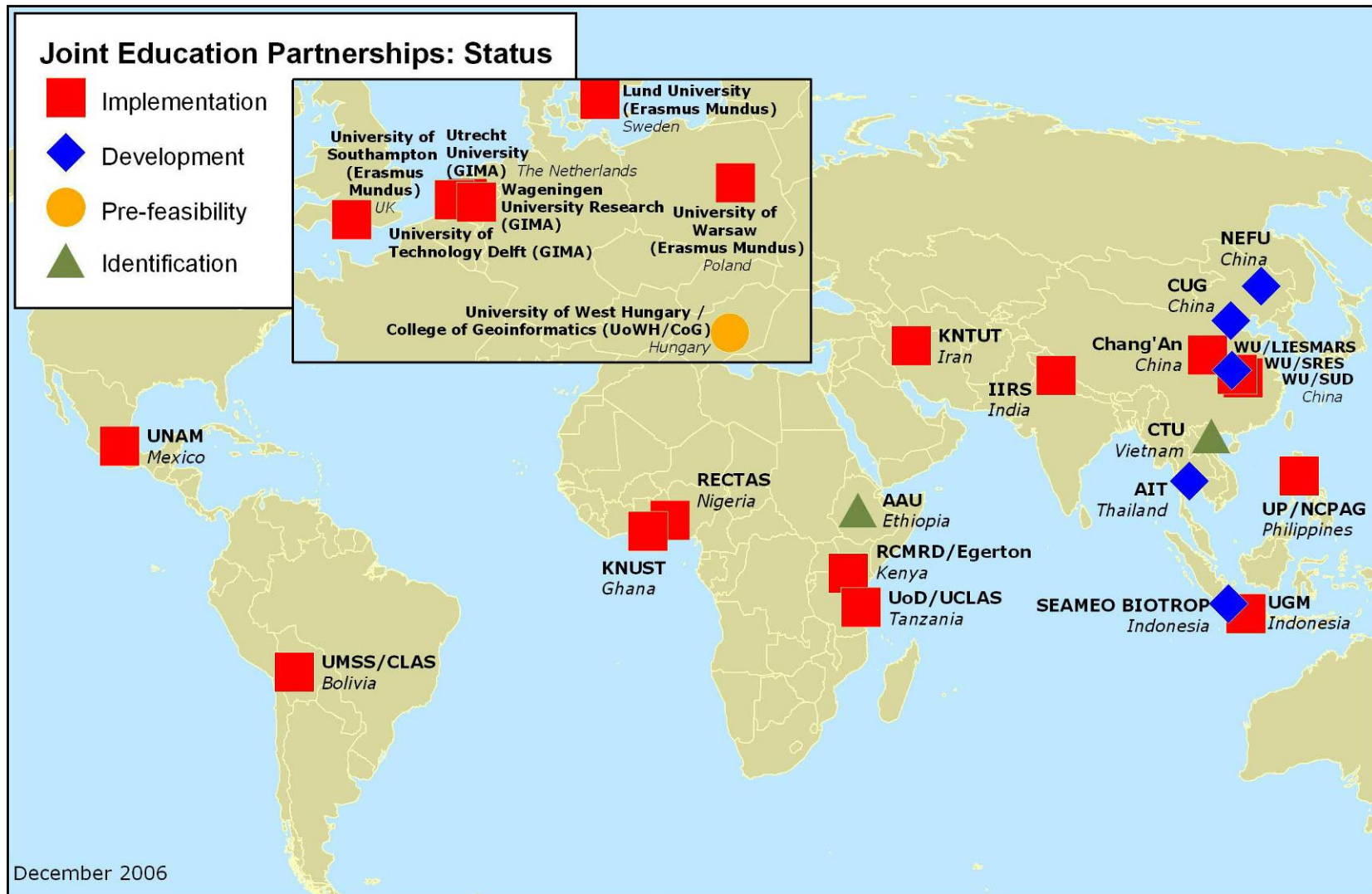
<u>Level</u>	<u>Duration</u>	<u>Modules</u>
PhD degree	3.5 years	
MSc degree	18 months	23
Master degree	12 months	15
Postgraduate Diploma	9 months	12
Diploma	4-9 months	
Short courses	1 week- 3 months	
Module = basic unit 3 weeks (144 hr)		

ITC's students



19.000+ course participants since 1950;
from 171 countries

Joint Education Partnerships (GI-NET)



December 2006



What is E-learning?

Learning facilitated and supported through the use of the Internet and other ICT.



Purpose of e-learning



Strategic Plan ITC 2005-2009: flexible and demand-driven educational program

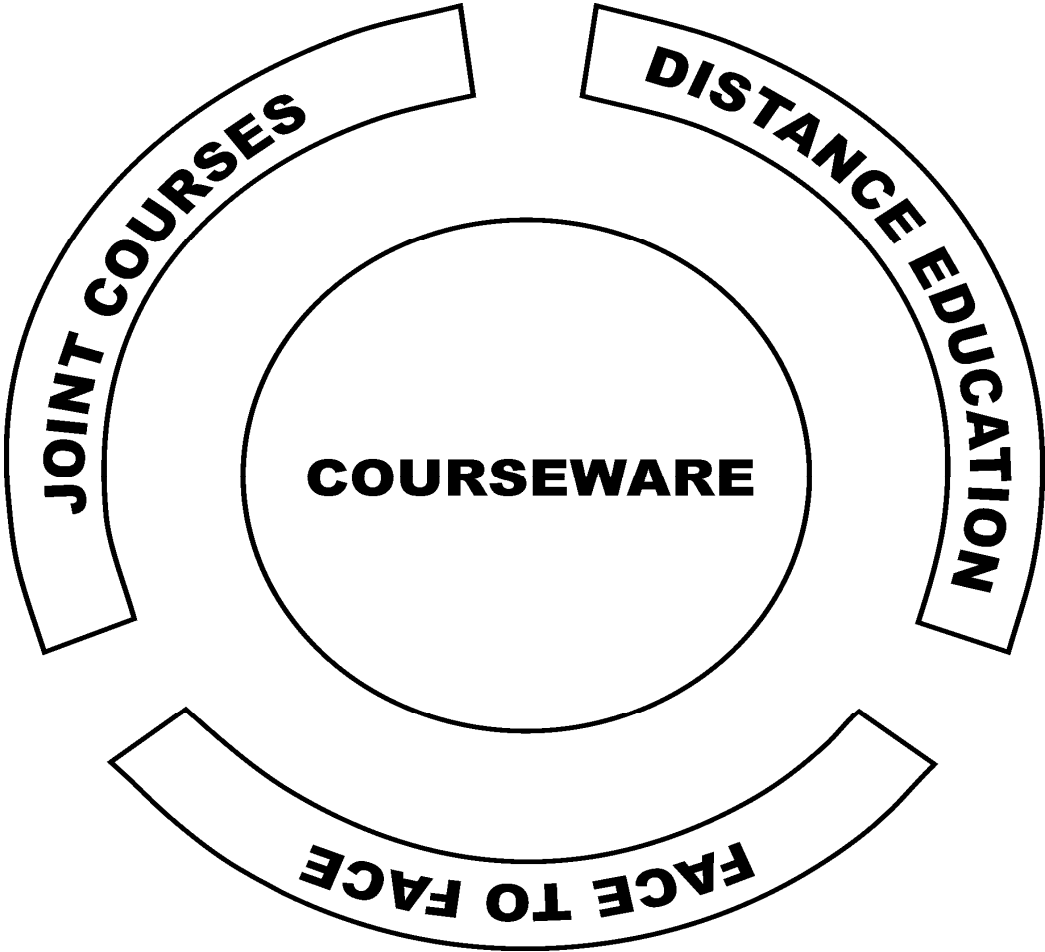
All ITC's programmes can be taken in different modes:

- Face-to-face at ITC
- Distance
- Face-to-face in joint course
- Combinations of the three

Project group E-learning



Multi-usable courseware



ITC's description of Courseware



- Blackboard environment
- All teaching and learning materials (literature, slides, assignments, data, standard help + feedback, discussion items, example exams, assessment criteria, etc.)
- Guidelines for teachers

Suitable for online learning / DE

ITC's project group e-Learning 2005-2008



Main working packages

1. Short distance courses
 2. Supervision of thesis at a distance
 3. E-learning in F2F courses at ITC
 4. E-support to joint courses incl. E-support by partners to courses at ITC
- Staff development
 - Library services for e-learning / e-portals
 - Support unit e-learning
 - Coordination of DE and e-learning

Short distance courses



- Existing F2F modules (full-time 3 weeks) >>> distance courses (part-time 6-8 weeks)

Year	Number courses	Total # part.	Average # part.	# from dev. c.	# from EU s.l.	Drop-out rate
2004	2	14	-			
2005	2	11	-			
2006	5	71	14			
2007	8	141	18	115	26	33%
2008	9	?				
2009	13	?				

ITC Distance Education courses (2008):



1. Principles of Remote Sensing
2. Principles of Geo-Information Systems (GIS)
3. Principles of Databases
4. Geo-statistics and Open-Source Statistical Computing
5. Hyperspectral Remote Sensing
6. Environmental Impact Assessment (EIA)
7. Spatial Decision Support Systems (SDSS)
8. Principles of Spatial Data Quality
9. Digital Terrain Model Extraction, Processing and Parameterisation for Hydrology
10. Visualisation

Supervision of thesis at a distance



- Fully implemented in courses at ITC
- Only for better students
- Not much done
- Students save a lot of money
- Students prefer dedicated time at ITC
- Staff prefers face-to-face

- Often in joint courses (second supervisor)

50% of MSc courses at distance



Is already possible:

- First 3.5 months at distance
- 9 months at ITC: domain modules, advanced subjects and thesis preparation block
- Thesis at distance (5.5 months)

E-learning at ITC



- Some enthusiastic lecturers (often lecturers involved in DE)
- Difficult to implement directly
- Face-to-face contact is easy at ITC
- Distance materials used in ITC

E-learning in joint courses



- Mainly video-conferencing, web-conferencing, thesis supervision at distance and e-mail
- Difficult to implement
- Limited infrastructure in LDC countries

eLearning Conference Accra Ghana June 2008:

“Main problem (in Africa) is not infrastructure but attitude of lecturers and management and lack of staff training”

New Strategic plan ITC 2009-.....



Expand ITC's network of partners in joint education (GI-NET)

V

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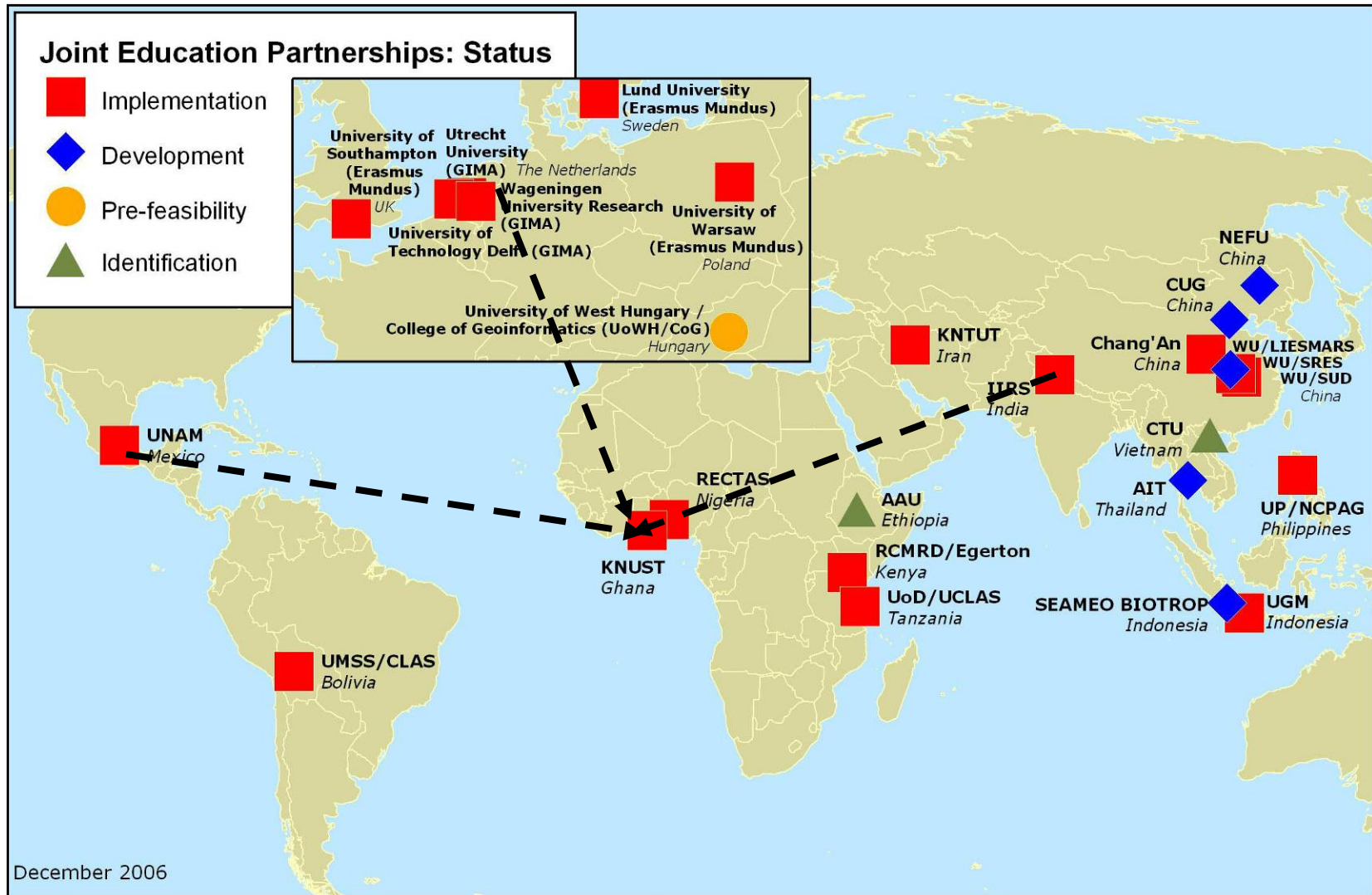
Virtual university

for Geo-Information Science and Earth Observation



Virtual university

for Geo-Information Science and Earth Observation



Examples of DE courses

How multi-usable is the courseware?



Design principles:

- Blackboard
- Communication online; learning materials offline
- Task-based learning
- Students cooperate; help each other
- Multi-usable courseware

Task-based learning



Reading material, exercises, self-test, group work, peer review	P
	P
	P
	P
	P
	P

Task-based learning



- One task per topic
- Integrated tasks
- Project based

3 examples of DE course materials

How multi-usable are the materials?



- Struggle:
 - to 'replace' lectures
 - how to provide feedback efficiently
- Not yet well-defined design for multi-usable courseware
- Individual learning; limited use of discussion board and collaborative learning

DE materials are often fed back into F2F (is currently evaluated)

- E-lectures
- Self-tests
- Fieldwork video
- Exercises and assignments



- DE Principles of GIS
- DE Geo-Statistics
- DE Spatial Decision Support Systems



How further?

- More training and support
- Development of standard designs for DE and multi-usable courseware
- Focus on collaborative learning in DE

- Involve GI-NET partners and cooperation with other online networks
- Let's do it: fully online degree programme

Thank You

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