

**GLOBALISATION OF INTERNATIONAL EDUCATION  
- ITC'S CHALLENGE OF MAINTAINING QUALITY -**

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**ABSTRACT:**

Since the founding of ITC in 1950, its educational programmes, delivered in the Netherlands, have served over 15,000 mid-career professionals from about 165 countries. In response to changing international conditions and an increased need for flexibility in post-graduate education among its target groups, ITC has recently changed its policy. A new strategy has been initiated, transferring part of the delivery of the educational programmes to the home countries of ITC's clientele through joint educational programmes with qualified partner organisations. In doing so, ITC aims at developing a global international network of educational organisations that accept and accredit one another's education. The network currently includes six partner organisations (besides ITC) and countries, with joint programmes conducted partly in these countries and partly at ITC in the Netherlands. One of the main challenges ITC faces with these joint programmes is to maintain quality standards at the level applied in the Netherlands while simultaneously observing the quality conditions applied by partner organisations. Since the start of these joint educational programmes, quality assurance measures have been incorporated – during the development of the curricula, the training of trainers, the establishment of assessment criteria and the exchange of teaching staff, as well as joint assessment during and upon completion of the programmes concerned. More recently, and initially as a by-product of the development of distance education programmes, the introduction of an internet-based education platform, Blackboard®, has proved a step forward in quality assurance. This platform allows teaching staff from both ITC and the partner organisation, thousands of kilometres apart, to co-teach at a distance and monitor the quality of the teaching. It simultaneously allows the individualisation of the support to course participants, an essential precondition when dealing with mid-career professionals from various backgrounds and with a wide range of experience.

**1. CHANGING CONDITIONS FOR INTERNATIONAL EDUCATION**

**1.1 ITC - The International Institute for Geo-Information Science and Earth Observation**

ITC was founded in 1950 in response to an appeal by the United Nations to the Netherlands government to make its expertise available for building capacity in the developing world to handle, what we now refer to as, geographical information, in particular by applying earth observation.

Since its founding, ITC's educational programmes, delivered in the Netherlands, have served over 15,000 mid-career professionals from about 165, mainly developing, countries. The effect has been tremendous, with considerable progress and enhanced capacity across the world in using earth observation techniques to handle geographical information.

**1.2 Changing environment**

Changes have affected ITC since it was established half a century ago. Over the years, ITC has continually adjusted its programmes and its services to accommodate changes resulting from developments in both technology and society. The use of earth observation, in addition to cartography, for resources management and the introduction of satellite remote sensing resulted in adjustments not only in programmes but also in the name of the Institute (although the brand name "ITC" has remained the same

throughout these years). Increased demand for local education and training capacity led ITC to support organisations across the world through institutional development in strengthening their capacity and capability to provide education and training locally to both individuals and entire organisations.

It is likely that the developments ITC will face in the next five to 10 years will have implications for the Institute far greater than those of the first 50 years altogether. One of the most important developments is the rapid change in demand for ITC's education, training and advisory services. The large number of applications confirms that demand for ITC's academic degree programmes is still substantial. Nonetheless, consultations with client organisations indicate that mid-career professionals in important decision-making positions, or with the potential to grow into such positions, have difficulty in sparing the time to be away from work and home for extended periods and are looking for options that take this on board. Moreover, national education and training capacity in the developing world has developed tremendously and caters for a substantial part of the local need for capacity.

### 1.3 Mission statement and strategy

To address the rapidly changing conditions in the demand for its education, training and advisory services, ITC has embarked on an ambitious strategy set out in a strategic plan for the period 2001–2004 (ITC, 2001). The aim of the Institute is defined as providing international education in geo-information science and earth observation through knowledge exchange. These knowledge exchange activities aim primarily at capacity building (of individuals) and institutional development (of entire organisations) for and in countries that are economically and/or technologically less developed (LDCs).

Much more than during its first 50 years, ITC wants to base these knowledge exchange activities on partnerships with scientific and professional organisations in both the developed world and LDCs. ITC's aim is to act as a node in an international knowledge network or as a gateway between professional and scientific organisations in LDCs and the Western world.

## 2. FROM DECENTRALISATION TO GLOBALISATION

### 2.1 Decentralisation

To address the increasing demand for flexibility in academic degree programmes, one of the major strategic actions incorporated in ITC's strategy is the transfer of ITC-accredited educational programmes (both degree and short courses), or parts therefore, to certified partners in LDCs. This so-called "decentralisation", also known as "transnationalisation" (GATE), will involve engaging in partnership arrangements with reputable qualified (and preferably) educational organisations that will take care of part of ITC's educational programme. Besides bringing the education to its clients, it is reckoned to be more cost-efficient and effective, as borne out by a recent review of ITC conducted by its Scientific Council, which applauds and supports this strategy.

The aim of the Strategic Plan 2001–2004 is 12 and 20 operational partnerships by the years 2004 and 2010 respectively. The following regional distribution is envisaged by 2010:

Asia	6 – 10 partnerships
Africa	6 – 10 partnerships
Latin America	2 – 4 partnerships
Central and Eastern Europe	1 – 2 partnerships

For purposes of identifying and selecting potential partners, ITC uses the following six criteria, which combine scientific, commercial and strategic goals:

- *Principle*: potential partners should agree to the principle of equal partnerships, i.e. collaboration based not on dependent donor-recipient relations but on shared responsibility;
- *Market opportunities*: there should be a well-defined market for the type and specialisation of the programme offered;
- *South-to-south relationships*: potential partners should also be interested in entering into collaboration and/or offering their services to organisations and individuals outside their own geographical location;
- *Institutional and legal aspects*: potential partners should be eligible in their country/region to organise joint educational programmes and to issue (joint) academic degrees;
- *Capacity and capability*: ITC and the potential partner should have the capacity and capability to assume responsibility for carrying out their respective parts of the educational programme both locally and abroad; and

- **Funding:** potential partners and ITC should agree that in principle they will be jointly responsible for funding the joint programmes from their own (subsidy) resources and external fellowships. In principle there will be no transfer of funds between partner organisations.

Although principally partners will be responsible for funding their own part of the activities, successful sustainable partnerships will require a considerable investment of time and money. It is foreseen that both ITC and potential partners may not have sufficient resources at their disposal to cover the initial financial investment involved. Consequently additional external project funding will have to be pursued wherever possible.

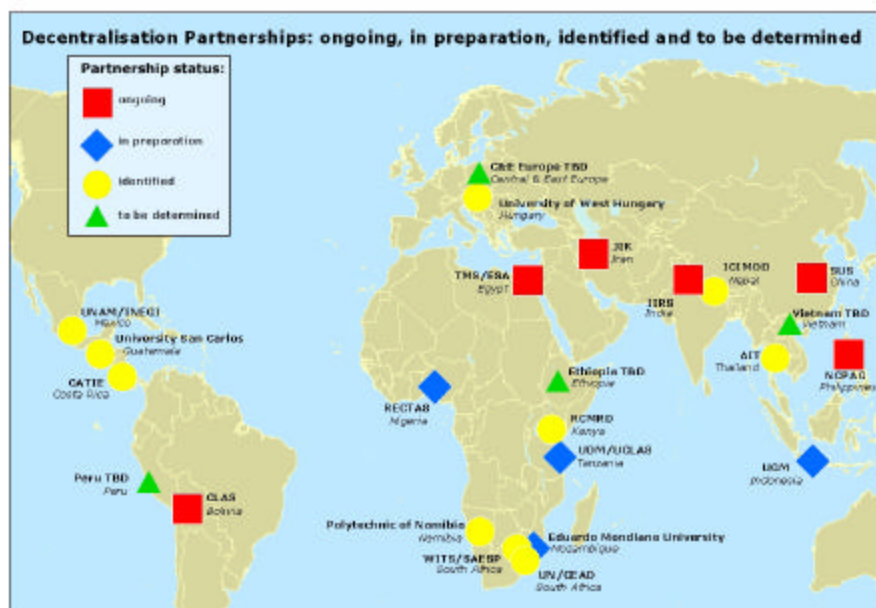
## 2.2 Globalisation

While initially restricted to transferring the standard ITC programmes under the term “decentralisation”, experience rapidly revealed that adjustment to specific local conditions was required. Strong (potential) partner organisations that already deliver their own educational programmes prefer to combine their ongoing programmes with elements of the ITC programmes. As a result ITC has gradually started to combine and integrate their own programmes with ongoing programmes of these organisations. This implies that ITC now needs to simultaneously address its own (accreditation) conditions and criteria and those of these partners.

In certain other cases, arrangements have been made or will be made for partners to organise their own sub-national or sub-regional partnership networks. The aim is to eventually establish a worldwide network of educational organisations that run programmes open to course participants who accumulate credits from different associated organisations, leading to an academic degree. “Globalisation” of education seems an appropriate term in this respect.

## 2.3 Current status

Having implemented a number of pilots since the mid 1990s, a small network of partner organisations has now been developed. At this moment, there are some six partnerships with ongoing joint educational programmes. With four partners, joint programmes are being prepared, while with 10 organisations serious intentions regarding collaboration have been confirmed and are now awaiting further elaboration and preparation. In view of market conditions, geographical distribution and funding opportunities, potential partners still need to be identified in four countries.



At this moment, about 135 students are enrolled in the six ongoing ITC-accredited post-graduate programmes conducted with partners in Iran, India, China, the Philippines, Bolivia and Egypt. Some of these programmes are carried out entirely in the countries concerned, others are carried out partly at ITC in the Netherlands.

<p><b>Iran – JIK</b> Awards: PM and MSc Language: English and final examination at ITC</p>	<p><b>Modality:</b> PM programme: 12 months entirely in Iran MSc programme: 12/13 months in Iran followed by 5/6 months</p>			
<p><b>Bolivia – CLAS</b> Awards: PM Language: Spanish programme at ITC</p>	<p><b>Modality:</b> 11 months in Bolivia Successful completion and sufficient English allow access to MSc</p>			
<p><b>Egypt – ESA</b> Awards: Certificate Language: Arabic</p>	<p><b>Modality:</b> 8 months entirely in Egypt</p>			
<p><b>China – SUS</b> Awards: MSc Language: Chinese / English</p>	<p><b>Modality:</b> 30 months in China combined with 6 months at ITC</p>			
<p><b>Philippines – NCPAG</b> Awards: MPOA at ITC Language: English</p>	<p><b>Modality:</b> 15 months in the Philippines followed by 3 months and final examination at ITC</p>			
<p><b>India – IIRS</b> Awards: MSc Language: English</p>	<p><b>Modality:</b> 15 months in India followed by 3 months and final examination at ITC</p>			
PM	Professional Master	/	MSc	Master of Science

### 3. QUALITY ASSURANCE

#### 3.1 Points of departure

One of the main challenges of these joint educational programmes for both ITC and the partner organisation is to maintain quality standards at the level applied by both partners to their regular programmes, which in turn are related to accreditation conditions in the various partner countries. Initially, when activities were limited to transferring ITC programmes to other countries (decentralisation), ITC's criteria were considered as the point of departure for quality assurance. Rather quickly it was realised that partner organisations are also bound to quality criteria by official regulations (e.g. see McBurnie, G. and C. Ziguras, 2001).

Quality assurance of joint educational programmes is pursued in three ways:

- *Development* of the collaboration: directed at creating equal quality of the programmes offered by both partners;
- *Management* of the collaboration: directed at ensuring efficient and effective quality control; and
- Quality assurance *instruments*: during the preparation, implementation and consolidation phases.

#### 3.2 Development of the collaboration

The development of collaboration for a joint educational programme goes through three phases: 1) identification, pre-feasibility assessment and selection; 2) formulation and design; and 3) implementation and consolidation. At the end of each phase partners explicitly decide whether or not to proceed with the collaboration.

##### 1. Identification, pre-feasibility assessment and selection

Partners are identified on the basis of the criteria listed in section 2.1. A joint pre-feasibility assessment in which partners elaborate these criteria may result in the selection (i.e. intention of both partners to formulate and design a joint educational programme). This first phase may be concluded with a Memorandum of Understanding or an Expression/Letter of Intent. In general potential partners have been

identified among 1) organisations with which ITC has been or is collaborating within the framework of externally funded institutional development projects; 2) organisations with the clear potential to become a partner in view of the criteria; and 3) organisations that have actively approached ITC to enter into such a partnership.

### *2. Formulation and design*

During the formulation and design phase the various criteria listed above are assessed by both partners in more detail. Market conditions are assessed, a marketing plan is prepared, institutional and legal aspects are sorted out, a curriculum and an educational programme are developed, the capacity and capability required to implement the programme are assessed, and task and responsibility distribution and funding are elaborated. The results of this phase are set out in a business plan and a curriculum development plan, which may subsequently become part of an official collaboration agreement signed by both partners.

### *3. Implementation and consolidation*

Implementation of the business plan and curriculum development plan prepared during the second phase generally starts with partner staff members participating in a Training of Trainers (ToT) programme at ITC. The partner's and ITC's components are then implemented, with a decreasing degree of ITC staff involvement in the partner's component at the partner's premises.

## **3.3 Management of the collaboration**

### *Management of ITC programmes*

With regard to the educational programmes organised entirely in the Netherlands, ITC applies a clear management structure to ensure quality. The Head of Education, acting as process manager, supervises the programme directors, and coordinates and is responsible for the actual *implementation* of the programmes. The Head of Education is supported in these tasks by Programme Boards, who provide advice on the selection of candidates, the execution of each individual educational programme, performance assessment criteria and results. Both internal and external reviews are used to advise the Directorate on general *policy* matters, allowing the Directorate to assess conditions and (re-)formulate policy if appropriate. This management structure has proven to be effective.

### *Management of joint educational programmes*

In the case of joint educational programmes, however, a more elaborate system will be required in order to simultaneously address the requirements of the partner organisation. Meeting the requirements of both partner organisations has proven to be complicated.

- In one case, the programme was incorporated entirely within the scope of the regular ITC programme as specified above. Although this proved to work effectively for ITC, insufficient attention was paid to the requirements of the partner organisation.
- ITC has also been experimenting with a system whereby each partner assigns one programme director, both being responsible for the whole programme. With regard to operational and policy advice, Joint Programme Boards have been set up consisting of at least two scientific staff members from each of the partner organisations. These Boards are responsible for ensuring that quality criteria and procedures are adhered to. Policy is formulated by a Board of Directors, each of the partner organisations being represented by a member from management level (rector, director). The Board of Directors makes policy decisions on the basis of advice received from the Joint Programme Board and independent internal and external reviews. Although from a collaboration point of view this management alternative seems the most appropriate, it has also resulted in undesirable compromises with regard to quality criteria.

These experiences have caused ITC to embark on a special study to elaborate management structures that meet all the requirements of both partner organisations.

## **3.4 Quality control instruments**

Both the organisation and the management of the collaboration are crucial for quality assurance. During the implementation and consolidation phase specific quality control measures are applied, as experience elsewhere has revealed that quality control tends to weaken over time, seriously threatening the quality of

the education. Quality concerns are shared by many organisations involved in transnational education (see also GATE; McBurnie, G., 2000; QAA; and UTS, 2001). At ITC the following quality control instruments have been put in place for joint educational programmes:

- *Training of Trainers:* A ToT programme is initiated in the earliest possible stage of the collaboration. The aim is to provide the partner organisation with adequate capacity and capability to ensure quality education (including the capacity to replace teaching staff if events so require). The ToT programme addresses both technical/subject matter and teaching/presentation skills. Following the initial ToT programme, staff capability is continuously upgraded by means of staff exchange and joint research and advisory services.
- *Joint assessment of module performance:* The teaching staff of the partner organisation and the teaching staff of the respective subject at ITC jointly develop the examinations and assess the performance of individual course participants.
- *Joint final assessment (of assignments, theses):* Since both partner organisations issue a degree, both are jointly responsible for the final assessment. This is generally effected by involving representatives of both partners in the final examination.
- *Joint quality review of the programme:* The entire programme will be reviewed by the two partners on an annual basis, using the results of individual subject evaluations, the end-of-programme evaluation, assessment results of the course participants, and the opinions of teaching staff and the programme directors of both partners.
- *Independent review.* Every three years, both partner organisations arrange for a review by independent specialists (at least one external specialist in the programme field and an education specialist). This review is based on the results of the annual joint quality reviews of the programmes and additional interviews and assessments.
- *External review/accreditation* Partners will be obliged by national laws to have their programmes accredited according to criteria and procedures that differ from country to country. Alternatively, in the case of programmes organised in different locations, accreditation by an acceptable leading international body is currently under consideration.

One instrument introduced to control quality of the joint educational programmes deserves special mention, i.e. *internet-based remote support*. Recently, and initially as a by-product of the development of distance education programmes, an internet-based education platform called Blackboard<sup>®</sup> has been introduced. This platform has various functions, including presenting lecture materials and conducting exercises, as well as chat and discussion board facilities.

Although the introduction of this internet-based support is occasionally being confronted with technical limitations, it allows supervising staff from both the partner organisation and ITC, thousands of kilometres apart, to co-teach at a distance and monitor the quality of the teaching. It simultaneously allows the individualisation of the support to course participants – a requirement when dealing with mid-career professionals from a variety of backgrounds and with a wide range of experience. Teaching staff of both partner organisations are experiencing this instrument as extremely effective for 1) structuring and presenting learning materials; 2) clarifying learning objectives and expectations to the students; and, very important, 3) enabling the teaching staff of the two partners to exchange teaching practices. Students appreciate the system as it gives them access to experts of both organisations and they also consider this good preparation for the part of the study at ITC.

#### **4. CONCLUSIONS**

The following conclusions can be drawn from ITC's experiences thus far with the development and implementation of joint educational programmes:

- Client organisations, individual clients, sponsors and external reviewers alike have reacted positively to the principle of transferring part of the educational programmes to the countries of origin of course participants. It meets the changing requirements for capacity building, and appreciates and strengthens the existing education capacity in these countries within a sustainable institutional setting.
- The development and organisation of joint programmes seem to be much simpler than in fact experience has revealed. An operational situation may be realised in the short term by copying the regular ITC programmes. From a long-term sustainability point of view, however, incorporation of specific local requirements and/or integration with ongoing local programmes may prove to be more appropriate.
- Quality assurance seems to be one of the most important concerns. However, ensuring the quality of joint educational programmes requires considerable time, effort and financial resources from both sides. Partners need to be aware and devise quality control instruments to assess the most efficient and effective combination.

- Partners will have to agree before embarking on a joint educational programme that, if experience reveals that quality criteria and procedures cannot be achieved and/or maintained by both partners, programmes will have to be terminated in order to avoid loss of status by either of the partners concerned. This requires an open attitude and a professional mentality in the collaboration.
- In partnerships directed towards delivering joint educational programmes with joint degrees, both partners have to appreciate the different conditions, criteria and procedures that need to be met by each of the partners (according to respective national law). For an organisation such as ITC, which has been involved in transferring rather than exchanging knowledge for a long time, this implies a shift in thinking and positioning when discussing, elaborating and implementing partnerships.
- The tasks of the teaching staff of both partners will change drastically as a result of the globalisation strategy. ITC teaching staff, apart from regularly teaching course participants at the Institute, will be engaged in remote support for students and staff of partner organisations. In addition, staff will be increasingly involved in curriculum and programme development, performance assessment and quality control. And although envisaged as being kept to a minimum, ITC teaching staff will be involved in lecturing on site at the partner organisation. This has implications for staff flexibility.
- Finally, the sustainability of a joint educational programme seems to depend heavily on the institutional embedding of such programmes in the regular management structure and the regular educational programmes of the organisations, and on the involvement and commitment of all staff rather than just certain individuals.

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