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Internationalisation at ITU: Results from survey among ITU students and graduates

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1. The project "Knowledge sharing on internationalisation"

ITU started the project "Knowledge sharing on internationalisation" in the spring of 2007 in order to collect and share students' (including graduates) and staff's international relations and experiences, and ideas on international collaboration.

Being a globally interactive university is part of both ITU's mission and ITU's vision, and internationalisation is part of ITU's strategic development. ITU believes that global interaction is a key instrument for achieving a ranking among the best universities in the world. It is important for both students and staff that ITU offers internationally relevant study programmes and research projects, that ITU attracts gifted international students and staff, and that ITU students and staff acquire internationally relevant competences, which make them attractive to foreign institutions and organisations.

The basis for establishing the project is a belief that students and staff at ITU already have considerable knowledge about the global status of IT research and education. Therefore, it is important to collect, share and organise as much as possible of this information and make use of it when discussing how ITU can become a globally interactive university with regard to teaching and research, as well as when identifying potential international partners and ways of collaboration.

The collection of experiences and ideas among students and graduates was in the form of an online questionnaire survey. Before the actual survey, the project group visited nine courses and presented the survey and informed about the ongoing initiatives regarding internationalisation at ITU. The courses were chosen so that the different study programmes were represented, and also a BSc course was involved. The courses represented approximately 440 students, of whom approximately 320 were MSc students.

All students and graduates were invited to take part in the survey through ITU's newsletter Friday Morning and through an individual email.

A total of 310 students and graduates from ITU have responded to the survey. The project group is satisfied with the number of respondents.

This report presents results and reflections from the survey on internationalisation carried out among ITU students and graduates in the autumn of 2007.

2. ITU students' and graduates' international experiences and desires

2.1 International experiences and relations

Many ITU students and graduates (125 of the respondents) have already studied abroad. Of course, for ITU's international students, studying at ITU is synonymous with studying abroad. But also ITU's Danish students have a wide experience of studies at other universities, typically from their bachelor's degree.

As it appears from enclosure 1, studies abroad have mostly taken place in Australia, Europe and the USA, but a few Danish students have also been to Central and South America (Costa Rica and Brazil), or to Asia (China, India, Japan and Nepal).

The wide experience from studying and/or working abroad, and the considerable number of international students at ITU, is also reflected in the many good and even strong per-



sonal relations which ITU students and graduates have all over the world in many different fields, cf. enclosure 2.

2.2 Studies abroad as part of ITU studies

As regards studying abroad, not surprisingly, ITU's international students generally have no wish to go to another country during their studies at ITU since, to them, studying at ITU is already studying abroad.

As to Danish students, many (75) would like to study abroad and have international experiences during their studies at ITU. The countries which ITU students would like to go to are primarily USA, Canada, Europe and Australia, but also Japan, South America, China and India are mentioned, see enclosure 3.

Interestingly enough, a slightly larger number of Danish students (80) explicitly say that they do not want to study abroad. They state as main reasons that they have family obligations, that they have already been abroad, that the two-year MSc study period is too short a period to plan and carry out studies abroad, that they work besides studying, that they are satisfied with ITU's courses, that it is too complicated to arrange, or that it is too expensive to go abroad. Among the atypical responses, one student feels that his English is not good enough to study abroad, and another student does not want any "culture shock" but prefers peace and quiet when studying.

2.3 Work abroad

Very many ITU students and graduates (227) would like to work abroad. A number of graduates already do so. The absolutely most popular country is the USA. Other preferred parts of the world are Canada, Europe, Australia, Japan, South America, China and India, see enclosure 4.

Whereas no one mentions Africa as an interesting place to study, seven would like to go to Africa to work. Likewise, although no one for some reason sees Sweden as an interesting place for study purposes, 11 find Sweden interesting as a country to work in.

Comparatively few students and graduates (46 respondents) explicitly declare that they would not like to work abroad Denmark in their future career.

3. ITU students' and graduates' proposals in relation to internationalisation

3.1 Students' and graduates' overall attitude to internationalisation at ITU

ITU students and graduates have contributed to the survey with many relevant and interesting reflections, ideas and suggestions.

First of all, the survey shows that ITU students and graduates are eager to express their opinion on internationalisation. Furthermore, quite a few of the respondents (57) offer to participate in focus groups if relevant.

Practically all students seem to welcome the idea of ITU becoming an international or global university and do not question that this development is positive. Only one student emphasises that ITU should first and foremost concentrate on being well established "locally", i.e. in Denmark, before having ambitions of being a globally interactive university.



At the same time, however, it is clear that students are uncertain as to what it means to be a globally or internationally interactive university, and what exactly ITU wants to gain by becoming a global university: Does ITU aim at a better economy, or is it "just" because it is trendy and what the ministry wants? Quite a few ask for clarifications and definitions.

Some students offer interesting definitions themselves, such as the three following examples:

- ITU will be a globally interactive university when EVERYBODY both students and employees have had close cooperation involving a foreign country or have been abroad to study or work.
- Being a global university means that students can go to the same university, just in another country, without having to worry if it matches what you would have learned at home.
- To me, the concept of a global, interactive university is an institution that serves students and researchers, offering top-class education and research services, "independent of space and time" – in the sense that the users (students, researchers) can utilise the services of the university anywhere in the world, in any time zone.

3.2 Total list of proposals and ideas

For clarity reasons, the total list of proposals and ideas for international cooperation in regard to teaching and study programmes have been divided into the categories which appear from enclosure 5, and which are elaborated below.

3.3 Network

3.3.1 International university alliances, collaborations and networks

This heading embraces proposals that ITU enters into strategic alliances with foreign universities, and suggestions that ITU is made part of a recognized/acclaimed university. In this respect students and graduates are in line with ITU researchers who in a similar survey have called attention to the same possibilities.

General collaboration with foreign universities can be in the form of cooperation on student projects, field/study trips, exchange of students and lecturers, and exchange of course materials.

More informal international networks can make collaboration easier. Therefore students and graduates furthermore propose that ITU could help build a network of universities with an ITU-ish profile, which will make collaboration in research projects and exchange of students easy.

Finally, ITU could also help initiate more research networking. Communication and collaboration with universities in other countries on research projects that are similar to ITU's will be useful for both ITU students and researchers.

3.3.2 Collaboration with industry

As regards collaboration with industry, ITU students and graduates suggest the following:



- ITU needs to have connections in Silicon Valley for both teaching/study and work possibilities
- ITU should try to get contacts with schools and industries outside Denmark. Collaboration with big game companies in USA and Europe would give ITU a better reputation and make others aware of ITU's existence
- More focus could be given to industry-sponsored projects. Global industry players should be invited to sponsor (and participate in) larger ITU research projects
- Collaborate with international IT companies in Denmark
- Get support from big international companies, for example through working on projects with them
- Make it possible for students to visit companies outside Denmark
- Give students more opportunities for contact with potential international employers.

3.4 Teaching

3.4.1 Study programmes and study contents

Students and graduates propose a number of concrete initiatives. The proposals include among others that ITU could:

- Develop BSc programme(s) in English
- Offer integrated international study programmes
- Attract US bachelor-level students to BSc programmes in English at ITU which would turn ITU into an international university overnight
- Develop new subjects, for example outsourcing, and have courses and/or conferences on the new subjects
- Invite foreign exchange or guest lecturers to ITU, also from developing countries
- Focus not only on the rich part of the world, but also on the rest of the world, and set up cooperation with universities in developing countries, for example the countries which Denmark supports, so that ITU students also know how to work with a view global equality

3.4.2 Teaching forms

Some students and graduates reflect on how teaching can be organised in a globally interactive university.

One student says that to him and many other students it has been a surprise to see how traditional - not to say old-fashioned - ITU is: *The education is almost entirely based on "synchronous, real-time" lectures (meaning that all participants must be present in the same room at the same time), evaluation is based on traditional (oral and written) inhouse exams, and teamwork is synonym with groups of persons seated around a shared desk. My vision would require very different forms of education activities, evaluation methods and teamwork models. To achieve such a transformation, I think ITU will have to make use of IT as a strategic tool. I am sorry to say, but today, I find this is not the case. IT is something that is taught and researched on, and it is also used as an administrative tool – but it is not integrated as a strategic tool to support the university's objectives and values.*

There are no easy solutions, but students and graduates propose that ITU could:

• Discuss how to find a balance and interaction between traditional classroom-based lectures and network-based teaching/e-learning: What can be done so that we do



not lose the important qualities found in classroom teaching, and so that we make sure that network-based teaching / e-learning give quality education?

- Discuss how student groups and research teams can form and cooperate in a globally interactive university: To what extent do they need to meet physically?
- Discuss what tools and methods are needed to support virtual teams and virtual meetings are needed. Possible keywords are web-conferencing, discussion groups, chat programs etc.
- Focus on innovation and new ways of learning and be sure to have international scope in teaching
- Set up case competitions and invite other universities to participate, or have ITU students participate in existing IT-related case competitions.

3.4.3 Evaluation forms

As one student points out, it also has to be discussed how evaluation can be organised at a globally interactive university. Arranging traditional exams will be a problem. The student asks if a shift from exam-based to evolution-based evaluation, i.e. following up on students' development process, could be an alternative?

3.4.4 Study structure

Several students mention that the MSc study structure does not give room for studies abroad, and that this has meant that although they would have liked to study abroad for a term, they have not found it possible.

They suggest that the existing study structure is changed or made more flexible so that there is room for a full term of studying abroad – or perhaps just so that a student can attend one or two courses abroad and a net-based course at ITU at the same time - or they suggest that studies abroad are made part of the MSc specialisation so thus an integrated part of the study programme.

Furthermore, students would like to have examples of how studies abroad can be done within the existing study structure, for example in the form of a guide for each MSc programme describing possibilities and relevant universities and courses, or in the form of a "package" in which an exchange period at another university is integrated in the study programme at ITU.

Some would even like to have a term abroad made an obligatory part of the students' BSc or MSc programme.

ITU students are aware that studying abroad is not the only way of obtaining international experiences, and that international experience can also be obtained in the form of "virtual" cooperation with students in other countries. This awareness is probably to some extent caused be the attention at ITU to the new concept of the "Global IT University". But nevertheless, it seems that actually living and studying in another country is what appeals the most to ITU students.

3.4.5 "Internationalisation" of courses

The survey reveals interesting ideas as to how ITU can "internationalise" courses, among them the following:

• Globalise ITU's online courses: Take point of departure in one of the existing online courses on offer and run a pilot project with a foreign university running the course as a combined effort between the two universities. This would be interesting both for the students (meeting each other online) and for the teachers



- Develop e-learning classes on global subjects
- Make relevant e-learning courses at other universities available to ITU students
- Make lessons virtualised by using video or audio or podcast, lessons would be accessible through the Internet, and it would be easy to attend lessons for anybody anywhere
- Set up weekend courses this would allow for common courses with universities within train/plane distance, e.g. Oslo, Stockholm, Hamburg and Berlin
- Offer courses in collaboration with geographically close universities, for example Lund University
- IT tools must be state of the art, not Luvit.

3.4.6 "Internationalisation" of projects

ITU students and graduates also have creative ideas as to how ITU can "internationalise" project work.

One student thinks that it is often difficult to get ITU supervisors to engage in projects on internationally focused reports. If the subject of the student's project is not enough focused on a Danish context, the student often has to use a supervisor from outside ITU.

Another student suggests that researchers at ITU who already work internationally with colleagues from other universities could involve students in their work.

Several students mention that they would like to have more project collaboration like the project with Peking University, China (Global IT University). They like the idea of working on projects (also exam projects) across borders with students from other universities with use of the Internet.

Other students are, however, sceptical about working on projects without having the possibility to meet in person. As one student says, *I would rather go to Peking University to study than work on a project with people whom I have never met. It is difficult enough to make group work function even across Copenhagen where you can meet a couple of times a week. I dare not think what it would be like to have communication and collaboration difficulties, not to mention the culture gap, if you cannot meet in person.*

3.4.7 Improvement of language

A couple of students suggest that ITU should offer more courses in English – or even all courses in English - because this would increase the possibilities of international students. One student thinks that this will not be a problem to the Danish ITU students since they typically feel very comfortable with English.

Not many students or graduates call attention to language problems. On the other hand, those who do have comments have in fact very critical comments.

Thus, several students mention that they think that ITU teachers should generally be better at teaching in English. One of them suggests that some testing is required of the teachers' knowledge of English because the level of English at ITU must be high if ITU wants to be taken seriously internationally.

Other students mention that the quality of English language teaching materials needs to be improved.

Finally, a couple of students find that information at ITU is sometimes given only in Danish even though all information should be translated into English, and one student sug-



gests that graduation speeches should be held in English because this would support the international students that attend these events.

3.5 Support

3.5.1 Support of new international students at ITU

It is obvious from the survey that ITU could do better when offering support to new international students at ITU. The suggestions from students and graduates include among other things:

- Establish a buddy system for new international students
- Arrange information meetings for new international students, and among other things inform new international students about the Danish concept of exams
- Give introductions about Denmark and Danish culture to international students
- Facilitate social integration for international students arriving at ITU: Sponsor a series of social events at ITU at the start of each term with activities encouraging the integration of foreign students into the rest of the ITU student body
- Arrange Global Village events. Global Village is a multi-cultural event, where foreign students (for example exchange students) can present current IT strategies and innovation strategies of their home country, introduce their culture and maybe even offer some national foods or drinks.

As regards establishing a buddy system, it should be noted that ITU's International Office has several times tried to "recruit" buddies among ITU students, but with little success. It is the impression that MSc students are generally too busy with studies and family obligations to engage as buddies for new international students.

Finally, a couple of international students call attention to the fact that ITU – like all other Danish universities – has to charge tuition fees from international students, and that this has resulted in a decrease in the number of students from countries outside the European Union. These students would like ITU to try and influence government policies in regard to tuition fees so that Asian students can return to Denmark and ITU. As they say, *Denmark needs sharp IT brains, and students from third-world countries can be key players in the booming Danish IT industry*.

3.5.2 Support of ITU students wanting to study abroad

It is likewise obvious from the survey that ITU students would like better possibilities and better support in connection with planning studies abroad. The suggestions from students and graduates include among other things:

- Offer more exchange study chances for ITU students
- The initiative with Peking University seems like a good idea. Expand the agreement with a possibility of arranging exchanges where students are sent to or received from Peking University for one term
- Gather information about corresponding IT study programmes in other countries and make it available to students
- Create better contacts to the good places in USA and Australia in order to establish exchange agreements. This would require networking and negotiations in person with the relevant universities, as emails or letters or telephone calls are not enough
- Make it easier to transfer credits from foreign courses, less bureaucracy
- Not so much bureaucracy and paper work



• ITU could emphasize research opportunities abroad in addition to career opportunities.

At present, ITU has bilateral exchange agreements with a number of European universities, but if a student wishes to study in the USA, Canada, Australia, India or China, there are not any easy ways to become an exchange student. ITU should work on defining what areas of the world are interesting to ITU students and try and set up collaboration with universities in these countries.

3.6 Information

3.6.1 Internal information: Improve visibility of possibilities

It appears from the survey that many students do not know the existing possibilities of studying abroad which ITU already has and do not know where to find information. ITU's International Office and its information and advice to students are not visible enough.

ITU's International Office informs and advertises via its own website on the Intranet and via ITU's newsletter Friday Morning. But it seems necessary that ITU's International Office should try to find alternative ways of informing students. The subject of studying abroad and/or working on projects across borders could form part of the Introduction Week which all new ITU students go through when they start studying.

3.6.2 Knowledge sharing at ITU

Students and graduates emphasise the importance of knowledge sharing:

- ITU's alumni system can and should be improved to strengthen the link between former students who may now be working around the world and the university
- Strengthen alumni cooperation between universities for the benefit of both students and professionals
- Make it easy for students to contact, share and use people and knowledge from other places
- Provide links to other universities that publish newsletters about international IT issues, scholarships and internships
- Support student networks: Personal relations could make it attractive to visit a university abroad and make the student more confident.

3.6.3 External information: Branding of ITU

Many students and graduates would like ITU to be more known around the world. This would make it easier to recruit international students with the aim of creating and maintaining an international student atmosphere at ITU, it would improve the possibilities of setting up international collaboration for study purposes, and it would improve students' and graduates' job opportunities abroad.

Students and graduates suggest the following:

- International ranking and evaluation: ITU should try to appear in World Universities Charts
- Improve visibility of ITU to potential international partners
- Make it known that Denmark is leading in IT and education
- Call attention to ITU's specialty programmes, for example MTG (Media Technology and Games) which is an area which few universities focus on
- "On the technical side I don't see this university really pushing any boundaries. I think that is how the university should be trying to gain international respect."



- ITU should have more international activities
- ITU should have more international students
- Attract and support foreign PhD students and make them take all or part of their PhD at ITU.

4. Conclusions and recommendations

4.1 Involvement

ITU students and graduates are, though busy with their studies or work, interested in sharing their opinions and participating in discussions about ITU's future international development. Students and graduates propose a number of concrete initiatives, some of which are not difficult to implement, and all of which are worth investigating further.

The project group wants to stress the importance of involving ITU students when planning further initiatives at ITU, and when discussing a strategy for internationalisation of ITU. ITU students should be involved in setting up scenarios and determining plans for ITU, and in formulating the internationalisation strategy.

4.2 Clarifications and further discussions

ITU has until now been in a phase of brainstorming on internationalisation, experimenting with different forms of international collaboration, and forming a basis for working out an internationalisation strategy for ITU.

At this point, many students express the need of clarifications and definitions of ITU as a globally interactive university, and the project group advises that now comes a time of clarifications, definitions and decisions.

4.3 Studies abroad or virtual collaboration

It is very evident from the survey that ITU students wish to acquire international competences.

Project work with students at other universities, such as for example ITU's collaboration with Peking University, appeals to some ITU students in the survey.

However, it is the project group's impression that when ITU students think of adding international elements to their studies, what appeals the most to them is the thought of actually going abroad to study and live in a culturally different environment. Of course, this can to some degree be due to the fact that the thought of "virtual collaboration" is still new to ITU students.

In any case, it is important that ITU continues working on both types of internationalisation of studies.

As regards studying abroad, ITU does not have enough exchange agreements at present, although the number of Erasmus agreements has been steadily increasing for the last couple of years. ITU especially lacks agreements with universities in the countries which are most popular among ITU students: the USA, Australia and UK/England. However, from the autumn of 2008, students are expected to have the possibility of taking the state subsidies with them to pay for studies abroad. ITU students will undoubtedly bene-fit from this, because it means that ITU students can choose among a wide spectre of universities, no matter whether ITU has exchange agreements with the university in question or not.



4.4 ITU's MSc study structure and studying abroad

If ITU students are to have better possibilities of going abroad to study, ITU faces the challenge of making the study structure for the MSc programmes more flexible so that there is room for a term abroad. It is very difficult to plan studies abroad within the existing study structure, unless the student is prepared to prolong the total length of his or her study period.

On this basis, the project group recommends that ITU looks at ITU's MSc programmes and investigates alternative ways of studying which makes it possible to integrate studies abroad for a term or for a summer period.

4.5 "Internationalisation" of courses and projects

Many students and graduates propose ways of giving both courses and projects an international touch. This could be an easy and at the same time effective way to provide ITU teaching with international/global perspectives.

The project group suggests that ITU's Boards of Studies are involved in discussing ways of "internationalising" courses and projects.