

International internship – challenge and possibility for a small country and a small school

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Abstract — An internship is an essential and important part of the Polytechnic Degree in Finland. In this presentation I will discuss the internship and especially the international internship at the School of Engineering and Technology, in Jyväskylä Polytechnic. Our engineering students can do their internship in Finland or abroad. An internal and international internship are considered in the same way. All the time the number of students who are interested to do the international internship is on the increase. Many big companies in Finland, e.g. Nokia, Metso, UPM -Kymmene, M-real, Agco, are international and very many small and medium-sized companies in Finland also are international or want to become internationalised. All these companies want to employ new internationally oriented engineers with good language skills. In planning a new degree programme one has to pay more and more attention to the fact that graduates should have skills to bring internationalisation into the working life. On the other hand we are improving our marketing methods so that the students from foreign countries could increasingly find us and find out our international engineering programme, international engineering courses and their own possibilities to do the international internship in Finland. Good cooperation with other polytechnics, universities, applied science universities, mills and companies in Finland and abroad is necessary and useful when we are developing the international internship system for incoming and outgoing students. Intermediary cooperation is one important and fruitful way to do the international internship cooperation.

Index Terms — Polytechnic, internship, international, cooperation, intermediary

BASIC INFORMATION OF FINLAND AND THE CITY OF JYVÄSKYLÄ

The Republic of Finland is the second most northern country in the world. A quarter of its total area lies north of the Arctic Circle. Finland shares a common border in the north with Norway, in the east a long border with Russia, on the south it is bordered by the Gulf of Finland, and on the west by the Gulf of Bothnia and Sweden.

Finland is a modern country with a high standard of living, a small and educated population of about five million. Finland has one of the densest networks of higher education institutions in Europe and about 23% of Finns have a higher-level degree. Overall, Finns are educationally well up front in Europe; young Finnish women, in particular are exceptionally well educated. In the parliamentary elections of 2003 women won 75 of the 200 seats. Finland got its first female President in February 2000 when Ms. Tarja Halonen was elected as the eleventh President of the Republic.

The city of Jyväskylä is situated in the heart of Finland, some 300 kilometres north of the capital Helsinki, and is surrounded by beautiful lakes, ridges and forests. The Jyväskylä region with a population of 110 000 is a modern centre for industry and learning. Its central location makes it easily accessible to other areas and towns in Finland.

FINNISH POLYTECHNICS AND ESPECIALLY JYVÄSKYLÄ POLYTECHNIC

Finnish Polytechnics offer a European model of professional and application-oriented higher education, set up alongside with the universities. Polytechnics offer a more practical alternative to university education. Courses differ from those at a university in the way that they reflect the practical needs of different branches of industry. The purpose of polytechnic is to raise the standard of professional skills and respond to the students' needs, and the changes in the fields of industry. At the same time the higher education system must also be on equal footing with other European Union higher education systems. Finnish polytechnic degrees are equivalent to a Bachelor's degree. The Degree Programmes represent the various fields of working life that the studies are connected with.

Jyväskylä Polytechnic was established in 1992 as an experimental polytechnic and formally licensed in August 1997. The polytechnic is a multidisciplinary institution of higher education with a strong international orientation. It provides polytechnic education combining theory and practice in a novel way. Jyväskylä Polytechnic offers higher education degrees specifically designed to respond to the needs of business and industry within the School of Cultural Studies, School of

Business, School of Engineering and Technology, School of Information Technology, School of Natural Resources, School of Health and Social Care, School of Tourism and Services Management and Jyväskylä Polytechnic offers also Vocational Teacher Education. Jyväskylä Polytechnic offers 26 Degree Programmes in these seven schools added with Vocational Teacher Education College. In Jyväskylä Polytechnic there are about 7300 students with 300 international students and the number of teachers is about 300 and that of the other staff is about 270. There is an opportunity to do a post-graduate degree at the School of Engineering and Technology in the Programme of Wellness Technology, and at the School of Health and Social Care in the Programme of Health Promotion and Preventive Work.

In this presentation I will concentrate on the School of Engineering and Technology which is the biggest school of Jyväskylä Polytechnic. In the School of Engineering and Technology there are about 1300 students and it offers 7 degree programmes, one of which, Logistics Engineering, is entirely conducted in English and one of which, Paper Machine Technology, is partly conducted in English. The other 5 degree programmes are Civil Engineering, Laboratory Sciences, Logistics, Mechanical and Production Engineering and Medical Engineering. In the School of Engineering and Technology students will qualify as Bachelors of Engineering in four years with the exception of the Programme of Laboratory Sciences where students will qualify as Bachelors of Laboratory Sciences in three and a half years.

INTERNSHIP

An internship, in other words a practical training, is an essential and important part of the polytechnic degree. The minimum duration of the internship is 30 ECTS Cr = 30 European Credit Transfer System Credits which means about five months' full-time practical training and which is one eighth part of the whole polytechnic study programme. Internship schedules after one and a half or two years of studies so the internship takes place during the fourth or fifth semester of studies depending on the degree programme. Students can do their internship in Finland or abroad. In Finnish Polytechnics the internal and international internship are considered in the same way.

By working in companies or mills students can reflect the studies they have made already and, on the other hand, they get such experience which help them to adapt the advanced studies in the following semesters. Besides working as a normal worker in a company or mill during the internship every student has to do learning tasks connected with his or her studies. Every student will get familiar with the operations of a company as a member of the working community, making observations and compiling an internship report on four fields of operation in the company, which have been agreed on together with a representative of the company, the tutoring teacher and the student. The internship also serves as communication training for the job application process and public relations. The internship report is a written communication exercise. If the internship is carried out abroad, the report is written in English. After the internship students will take part in a seminar where every student will have about a 20-minute presentation of the internship. Student guidance and supervision that both the tutoring teacher and the representative of the company do has a big influence on the student's successful internship.

In the future there will be some changes concerning the requirements of the student's tasks before, during and after internships. We have already decided that e.g. Paper Machine Technology programme students have to do portfolios for their internships. In the internship portfolio every student has to make a written plan of internship, to write memorials of meetings and interviews, to collect material, to investigate, to make a written report after internship and also has to have an oral seminar presentation after the internship.

INTERNATIONAL INTERNSHIP

During the previous study year about 30 engineering students did the international internships. All the time the number of students who are interested to do an international internship is on the increase. One big and important reason for this phenomenon is that our tutoring teachers and those students who have already done international internships encourage students to choose this magnificent alternative. Another reason is that our students know very well that many big companies in Finland, e.g. Nokia, Metso, UPM-Kymmene, M-real and Agco, are international and very many small and medium-sized companies in Finland also are international or want to become internationalised. All these companies want to employ new engineers with good language skills. The third reason is that those students who want to go and work abroad after the graduation know that the international internship is a good and safe training period for that.

It is desirable that the students improve their language skills before international internships. Many engineering students have already fair or good general English language skills when they start their studies in our school because in Finland almost everyone studies English during his or her basic school days and we can all the time listen to English on mass media and read written English texts. During polytechnic studies our students will learn the professional English vocabulary and they can easily improve their general English language level. In Central Europe, e.g. Austria, France, Germany, Italy, there are many

suitable international internship placements for our engineering students and that is why it is good if students who want to go and work there improve also German, French or Italian language skills before their international internships. The language improvement is easy for our students to do because the Language Centre of Jyväskylä Polytechnic offers every semester courses in several levels and several languages, e.g. English, Swedish, German, French, Italian, Spanish, Estonian, Russian, Bahasa Indonesian and Mandarin Chinese.

Nowadays many engineering students are also interested to do their internship in Australia, Canada, China, the USA, etc. As well as good language skills the basic knowledge of foreign culture is important and useful before students will start their international internships. In planning the degree programmes more and more the fact that graduates should have skills to bring internationalisation into the working life should be taken into account.

COOPERATION

Every year about 40 international students come to study in our school. During the last few years we have got incoming students from Estonia, Russia, Poland, Germany, France, Austria, Portugal, Spain, the UK, Albania, Tanzania, Somalia, Morocco, China, Indonesia, Singapore, etc. About 30 of them take an entire degree programme and about 10 of them study for a shorter period. Some international students who at first study for a shorter period in our polytechnic later also want to do their international internships in Finland. Because we want that the number of incoming students will increase we have to find good marketing methods that will help international students better and better to find us and find out our international engineering programme and international engineering courses and also their possibilities to do international internships in Finland. Cooperation with other polytechnics, universities, applied science universities, mills and companies in Finland and abroad is necessary and fruitful. The cooperation could be, e.g. student exchange or acting as an intermediary, as shown in Figure 1. Acting as the intermediary means that e.g. our polytechnic will search for suitable companies and mills in Finland where international students of foreign, sending institutes could come to work and do their internships. Acting as the intermediary also means that our polytechnic will help the international students to find good and suitable accommodation and to adapt to a new environment. The foreign, sending institute can be a foreign university or a foreign applied science university. During the intermediary cooperation as well students as employers will become more and more international.

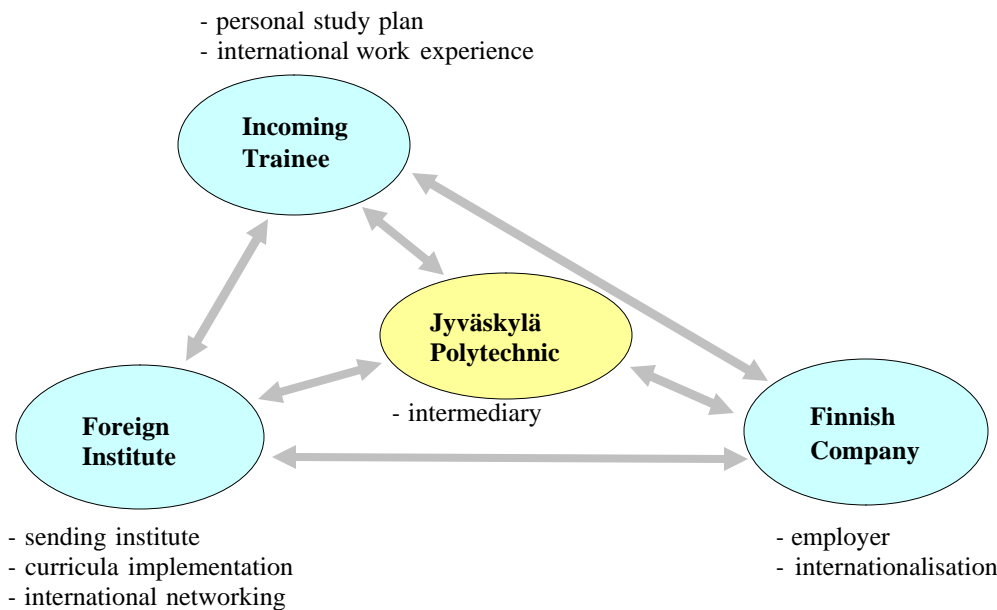


FIGURE 1
INTERNATIONAL TRAINING PARTNERS WHEN PERSPECTIVE IS INCOMING TRAINEES

On a reciprocal basis, when our students want to go and work abroad and to do the international internship, a foreign institute, could be the intermediary and Jyväskylä Polytechnic could be the sending institute, as shown in Figure 2. The important task for us is to choose suitable companies, mills and institutes with whom to do the closer cooperation. We have already had very good intermediary cooperation with some Central European universities and applied science universities in

Austria, France and Germany. But we are searching all the time new cooperation partners with whom to expand our activities.

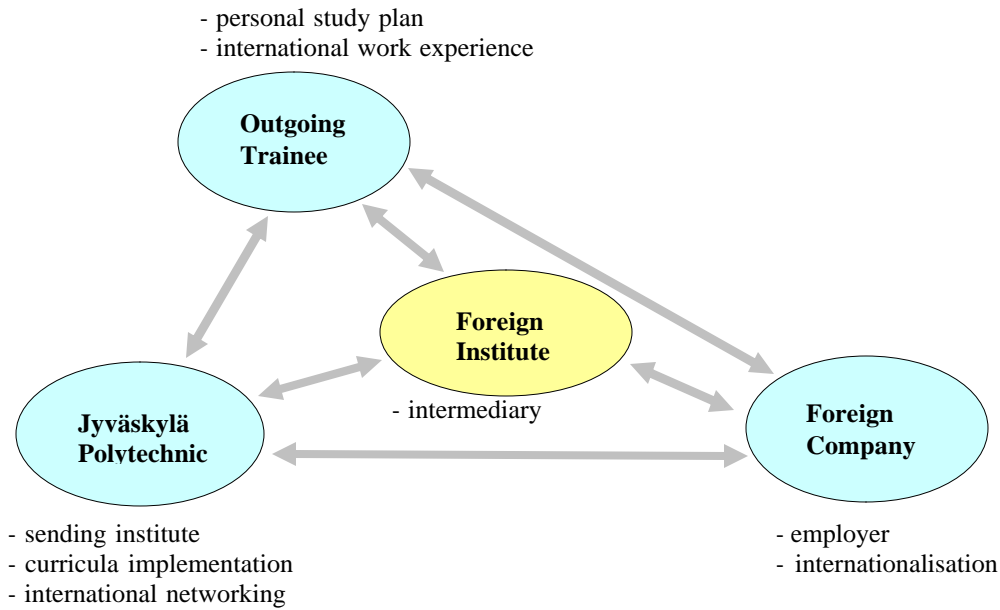


FIGURE 2
INTERNATIONAL TRAINING PARTNERS WHEN PERSPECTIVE IS OUTGOING TRAINEES

CONCLUSION

The international internship will help students to become more and more international and broad-minded. It is desirable that the students improve their language skills before international internships. As well as good language skills the basic knowledge of foreign culture is important and useful before students will start their international internships. In planning a new degree programme one has to pay more and more attention to the fact that graduates should have skills to bring internationalisation into the working life. The international internship, for its own part, will open the eyes of students to understand their possibilities when we are talking about the working life and employment opportunities. The international internship will also help students to find international working places abroad after their graduation. The international internship is a good and fruitful way for polytechnics to do cooperation with companies, mills, universities, applied science universities and other institutes in Finland and abroad. The intermediary cooperation is an excellent and important way to do the international internship cooperation with foreign institutes, companies and mills. During the intermediary cooperation as well students as employers, sending institutes and intermediary institutes will become more and more international.