

Collaborative Partnership in Education and Research

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ABSTRACT: *The paper concerns the process of enhancing the collaborative partnership in education and research between European universities on the basis of several international collaboration initiatives. The author is involved in the universities international collaboration as Rector's Representative for international contacts at Silesian University of Technology, Gliwice, Poland. The major enhancement of the scale and quality of international co-operation with respect to Central and Eastern Europe countries was possible with the launch of highly successful TEMPUS program in 1991. The author was the originator and co-ordinator of institutional building TEMPUS project called "Epicentre". The projects objectives included the substantial improvement of the SUT's International Relations Office operation, on the basis of invaluable experience of our partners from several European Union countries. The project activities included several important seminars, workshops and working visits as well as shadowing assignments. The staff of SUT's International Relations Office had a unique opportunity of getting access to various professional structure and operational procedures developed at the project partner institutions. The stress has been put on the activities around four major streams of European universities contacts: the TEMPUS program in its various phases, concerning the establishing of shortcuts on the way of CEE countries universities to full partnership; the Socrates program, concerning the students and teachers exchange, as well as collaboration in the field of modern and multimedia teaching techniques and joint curricula development; the Leonardo da Vinci program, concerning vocational training and establishing cross-links between higher education institutions and industrial enterprises in various European countries; the research oriented Framework Programs – the 5th and 6th – concerning the full partnership in important research initiatives with respect to research, development, presentation and dissemination.*

It has to be stressed that the "Epicentre" project turned out to be the real success and greatly enhanced the way of operation of International Relations Office at Silesian University of Technology. The "Epicentre" project activities took place immediately before the full association of Polish universities with Socrates, Leonardo da Vinci and research Framework Programs. As a result the SUT staff has been prepared from the very beginning for active participation in these collaboration initiatives which resulted in the highly successful access of SUT to these programs. The experience gathered through the "Epicentre" project realization resulted among other in granting the International Relations Office at SUT the role of Regional Contact Point with respect to 5th and 6th R&D Framework Programs and further in the involvement in the process of Poland accession to European Union. The Tempus project and subsequent active participation in Socrates joint projects, thematic networks, 5th and 6th Framework Programs networks of excellence and other multinational initiatives resulted in the substantial improvement of partnership contacts with other European universities and stepping up in the quality of international collaboration.

In recognition of the positive role of "Epicentre" project, the concept of such learn-by-example way of enhancing international collaboration has been disseminated among several possible TEMPUS TACIS and TEMPUS MEDA beneficiary partners.

1 COLLABORATIVE PARTNERSHIP AS PART OF UNIVERSITY POLICY

The purpose of this paper is to present the possibilities of international collaboration in education and research using the Silesian University of Technology, Gliwice, Poland, as an example.

The strategic development plans of several Central and Eastern Europe countries universities – including the Silesian University of Technology – include the need for establishing close contacts with

Western European and other countries universities with respect to research and teaching. The authorities of the Silesian University of Technology decided that such international contacts should be maintained and broadened with the following basic objectives:

- the researchers groups from cooperating universities would be involved in the realisation of research projects, especially the ones funded by the European Union, and especially the ones involving the industrial enterprises from the Upper Silesia region;
- there will be the exchange of teachers between cooperating universities thus making it possible to improve the contacts between the teachers from different countries universities which in turn would make it possible to work on the common curricula and special seminars and summer schools and prepare the ground for students exchange;
- there will be a constantly growing exchange of students between cooperating universities thus enabling the students to become more open-minded with respect to university studying and living in Europe; such exchange would also improve the popularity of the Silesian University of Technology among young people in the Silesia region and possibly cause that there will be better students at Gliwice University, better PhD students, better research workers, more successful EU grant winners, more successful research groups working on industry originated problems.

Taking the above arguments into account it is natural that the internationalisation and collaboration partnership at the Silesian University of Technology are among the top priorities of the university management. In addition the Polish National Strategy for integration with the European Union assumes growing role of science and education in that process. Therefore it is the basic element of the University strategy to promote collaboration between Silesian University of Technology and Members States universities in the field of education, research and development as well as vocational training.

2 THE BACKGROUND: SUCCESSFUL PARTNERSHIP AND COLLABORATION

Silesian University of Technology has participated in several university cooperation programmes and initiatives during the last 15 years, including SOCRATES/Erasmus programme participation, several TEMPUS and CEEPUS projects as well as research oriented projects in 4th, 5th and 6th European Union Framework Programmes. Within the SOCRATES programme framework the University was involved among other in the realisation of projects, which resulted in several jointly prepared multimedia courses for students to be delivered by means of Internet/Intranet techniques – one of the most successful projects of this kind was the Socrates/ODL LINK project. Similar projects concerned the substantial enhancement of the facilities in chosen laboratories in Silesian University of Technology, in particular making them accessible from other universities in Europe by means of computer networks techniques – in this case the most promising results have been obtained during the realisation of Socrates/Minerva LABLINK project. In addition the University maintains the education and research cooperation with several European and other countries universities on the basis of bilateral agreements concerning various forms of mobility and collaborative work. Such programme based as well as bilateral contacts form among other the proper foundation for developing the scheme of double diploma programmes, which is one of the specific aims of the Silesian University of Technology internationalisation policy. Further development of this cooperation idea includes the joint preparation European Master courses concerning various fields of engineering.

The long-term development strategy of the Silesian University of Technology is among other to make the university more competitive in acquiring funding as part of European Programmes framework. As a result of this larger number of Silesian Technical University students will have an opportunity to spend some time of their study period abroad - in the EU countries universities. It is believed that this in turn will cause the Silesian University of Technology to become more attractive for EU countries students who consider coming to Poland for studying e.g. in the Socrates/Erasmus programme framework.

3 INTERNATIONALISATION POLICY AT SILESIA UNIVERSITY OF TECHNOLOGY

The main objective that is supposed to be achieved among other by means of the realisation of the internationalisation policy is the enhancement of the Silesian University of Technology competitiveness and importance in the Silesia region of Poland. It means that the SUT's authorities suppose that the activities towards the internationalisation of the university structure, procedures and curricula would

create considerably wider possibilities of educational, training, research and development co-operation between Silesian University of Technology and other universities and enterprises in the Silesia region and Europe. The specific aims concerning the above formulated objective could be stated as follows:

- more students from Silesian University of Technology studying temporarily in EU universities, more foreign students coming to take courses in Silesian University of Technology;
- more research and development projects undertaken jointly with small and medium industrial enterprises from Silesia region;
- more projects gained and realised by groups from Silesian and EU universities in the framework of educational and research European co-operation programmes.

The details of the policy of collaborative partnership in education and research with respect to the Silesian University of Technology profile of operation could be stated as follows:

- starting new, specialised courses with appropriate curricula, including a modular form; responding to the needs of the labour market in Europe and specific calls for co-operation coming from industrial enterprises of the Silesia region and other European regions;
- gradual introduction of the European Credit Transfer System (ECTS);
- wider introduction of the two-stage degree system with the B.Sc. degree as the first stage and the M.Sc. degree as the second stage, also with respect to compatibility with cooperating with other European countries universities;
- development of new international contacts and exchange of experience through participation in various international programmes such as TEMPUS, Socrates, Leonardo da Vinci, European R&D Programmes (5th Framework Programme);
- gradual introduction of lectures given in foreign languages as an offer for foreign students completing part of their studies at the Silesian Technical University, e.g. Erasmus students;
- creation of new courses concerning the dissemination of the knowledge about the European Union;
- modernising and upgrading the laboratories equipment;
- introducing distance learning and continuing education;
- computerisation of the offices dealing with personal management, financial controls and students registration, especially with respect to international students;
- further improvement of the information flow system achieved by wider introduction of electronic methods, also with respect to international students.

4 THE IMPACT OF COLLABORATIVE PARTNERSHIP ON EDUCATION AND RESEARCH

It is obvious that in order to take part in the international collaborative partnership the university has to be sufficiently well prepared, organised and aware of all possible obstacles. On the other hand it could be easily observed that as part of the participation in such partnership the university becomes better prepared to undertake the future problems of international partnership initiatives. The following results of the participation in various forms of European cooperation could be observed at the Silesian University of Technology:

- the number of students from the Silesian University of Technology studying at foreign universities was growing, the same trend has been observed with respect to the number of incoming students.
- the facilities and procedures concerning the Erasmus students coming to Gliwice have been renewed and enhanced, large effort has been made in order to enable the students from abroad to accommodate smoothly to the Silesian University of Technology studying rules.
- the teams from the Silesian University of Technology were more active and successful with respect to applying for education and research oriented grants concerning their participation in the collaboration based European programmes.
- new and specialised courses have been started - enhancing the educational offer of the University and making it more international.
- the European Credit Transfer System has been prepared at all faculties of the Silesian University of Technology, the needed information materials and packages have been prepared and the system has

been started; the University faculties are determined to gradually enhance the ECTS system packages and its smooth operation.

- there were more and better examples of research oriented collaboration with small and medium enterprises from the Silesia region, especially as a result of dynamic operation of the European Programmes Bureau, International Relations Office and the Regional Contact Point for the 5th Framework Programme.
- the English language based lectures and laboratory exercises have been offered more widely at Silesian University of Technology thus enabling more foreign students to think about the possibility of studying in Gliwice. The whole meta-curriculum has been prepared at two faculties of the University, with all courses being taught in English.
- the laboratory equipment has been modernized, especially with respect to computers and network infrastructure which enabled better access to the worldwide network and better possibilities of communication with foreign professors, teachers, researchers and students.
- the University offices were better equipped and computerised which made it further possible to use modern communication methods between central and other offices, especially with respect to the planned electronic documents flow system.

In order to be fair one should also mention here the most important problems that could be observed in the development of international collaboration partnership, especially with respect to the education oriented collaboration:

- it was difficult to ensure the full reciprocity between outgoing and incoming mobility students in the Erasmus programme; it was not easy to attract really much attention among students from the partner universities;
- although the laboratory and offices equipment have been modernised, due to difficult budgetary situation of Poland and especially higher education institutions, the progress in this area was not fast enough and one could observe some vital lack of equipment when compared with several other countries universities.

5 FUTURE PLANS OF ENHANCING THE INTERNATIONAL COLLABORATION

On the basis of the above details it seems reasonable to seek the progress of the internationally oriented collaboration in education and research in the undertaking of the following specific tasks at the Silesian University of Technology:

- gradual introduction of lectures given in foreign languages as an offer for foreign students completing part of their studies at the Silesian University of Technology, e.g. Erasmus students;
- starting new, specialised courses with appropriate curricula, including a modular form; responding to the needs of the labour market in Europe and specific calls for cooperation coming from industrial enterprises of the Silesia region and other European regions;
- further enhancement of the European Credit Transfer System (ECTS), including applying for ECTS label and developing credits accumulation concepts;
- wider introduction of the two-stage degree system with the B.Sc. degree as the first stage and the M.Sc. degree as the second stage, also with respect to compatibility with cooperating with other European countries universities;
- introduction of internationally oriented project management courses that would attract student participants from other European countries and improve the chances for successful professional career start with respect to the Silesian University of Technology graduates;
- development of new international contacts and exchange of experience through participation in various European programmes concerning education and research;
- creation of new courses concerning the dissemination of the knowledge about the European Union;
- modernising and upgrading the laboratories equipment;
- introducing distance learning and continuing education on substantially wider scale;
- further computerisation of the offices dealing with personal management, financial controls and students registration, especially with respect to international students;

- further improvement of the information flow system achieved by wider introduction of electronic methods, also with respect to international students.

6 SPECIAL ROLES OF UNIVERSITY UNITS IN COLLABORATIVE PARTNERSHIP

A special role at the Silesian University of Technology belongs to the European Programmes Centre (“Epicentre”), which serves as a centre of information as well as new ideas and initiatives concerning all possibilities of European and world collaboration in teaching, mobility of students and teachers as well as research. The European Programmes Centre has been established at the Silesian University of Technology as a result of structural TEMPUS project and serves the academic and administrative staff and students. The Centre is an autonomous unit in the organisational structure of the University and its basic duty is to stimulate the students and staff to applying for participation in European Cooperation Programmes, with the special role of SOCRATES/Erasmus programme. The centre also ensures better access to all important information concerning the European Programmes, it helps the University staff in finding appropriate and valuable education and research partners and in professional preparation of the European Programmes projects application. The centre is involved in the dissemination of successful projects results, which should contribute to broader interest in such form of educational and scientific projects financing among the University staff members.

It has to be stressed that the “Epicentre” project turned out to be the real success and greatly enhanced the way of operation of International Relations Office at Silesian University of Technology. The “Epicentre” project activities took place immediately before the full association of Polish universities with Socrates, Leonardo da Vinci and research Framework Programs. As a result the SUT staff has been prepared from the very beginning for active participation in these collaboration initiatives which resulted in the highly successful access of SUT to these programs. The experience gathered through the “Epicentre” project realization resulted among other in granting the International Relations Office at SUT the role of Regional Contact Point with respect to 5th and 6th R&D Framework Programs and further in the involvement in the process of Poland accession to European Union. The Tempus project and subsequent active participation in Socrates joint projects, thematic networks, 5th and 6th Framework Programs networks of excellence and other multinational initiatives resulted in the substantial improvement of partnership contacts with other European universities and stepping up in the quality of international collaboration.

The Silesian University of Technology is also very active in promoting the European cooperation in the research and development area in the 5th and 6th EU Framework Programmes. A network of Contact Points has been established in Poland in order to help the groups of researchers in successful proposal writing and realisation. Silesian University of Technology has been appointed one of nine Regional Contact Points in Poland with respect to the 5th and 6th Framework Programmes covering the Upper Silesia region and its vicinity. The role of the Regional Contact Point is to promote the international cooperation of European groups of researchers, gather, filter and deliver information to the potential proposers, matching partners for potential proposal writing, assistance in proposal writing and the successful project realisation, help in the dissemination phase of the project.

The Regional Contact Point has become an extremely important unit at the Silesian University of Technology concerning the successful participation in the EU Framework Programmes at Silesian University of Technology and the general transfer of information on the possibilities of international collaboration in research towards the SUT staff. The scope of activities of this Regional Contact Point concerns the whole Upper Silesia Region in Poland and includes the development of international research, collaboration of regions in Europe, various education oriented initiatives including long-life learning as well as building the Information Society and e-Europe elements in Southern Poland.

The basic activities of the Regional Contact Point at the Silesian University of Technology could be formulated as follows:

- transfer of information concerning the EU Framework Programmes collaborative research from the European Union and National Contact Point network sources towards the research institutions and groups in the Silesia region;

- organisation of seminars, workshops, information days, training sessions and brokerage events concerning the information transfer and gaining the skills in finding partners, preparing the proposals and managing the project co-funded by the EU sources;
- preparation and maintenance of databases concerning the research potential of the Silesia region institutes and enterprises and assistance in finding the best possible partners for the project consortium in the EU Framework Programmes;
- preparation of various forms of information transfer with respect to the research possibilities and its distribution among the target research groups, especially the faculties and institutes at the Silesian University of Technology;
- in-depth help and advice on the preparation project proposal and the managements of successful project, including the financial management;
- help and advice on preparation of proposals concerning the utilisation of EU structural funds.

7 CONCLUSIONS

The Silesian University of Technology makes every effort to ensure that any possible additional grant for the realisation of the internationalisation cooperation would be obtained. Several activities concerning the international cooperation are funded through the central budget of the University for which the main source of funds is the State Committee for Research. The amount of money granted to the University faculties depends heavily upon the staff activity with respect to making research and publishing their results by means of books and journal papers. Various activities concerning international cooperation are funded through the grants allocated by the State Committee for Research with respect to successful Silesian University of Technology applicants. There are also examples of funding the cooperation by means of European Research Programmes grants as well as Preparatory Grants awarded by the Polish State Committee for Research with respect to research groups that are preparing their 5th and 6th Framework Programmes applications.

The University is also successful in obtaining funds from local Upper Silesia authorities as well as from regional industrial enterprises. This is the policy of the Silesian University of Technology to increase the number and importance of such international cooperation funding resources.

The international collaborative partnership in education and research is promoted at the Silesian University of Technology by the university highest authorities, International Relations Office, European Programmes Bureau "Epicentre", EU Framework Programmes Regional Contact Point, deans and vice-deans responsible for international collaboration and many other people. The smooth collaboration of all these bodies and people is necessary in order to guarantee the success of collaborative education and research initiatives.