International Association of Information Technologies Education as Effective Form of Academic International cooperation

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Abstract - Moving towards global informational and Hi-Tech society IT-educators should develop curricula and courses content which satisfy not only the specific current needs of the local region but reflect the actual aims of international development. Traditionally university graduates in IT field are real participants of international labour market. Their diplomas are easier recognized by foreign companies than of graduates in other fields. At the same time very common is the situation when universities follow old standards in preparation IT-specialists trying to fulfill local needs only having no information about the ways of building joint courses with foreign educators. In order to make ITeducation effective and internationally oriented educational institutions should investigate not only modern information technologies, software but specific demands of various countries and industries and their IT level as well as their academic experience. The problem could be solved by effective international collaboration and exchange of views, ideas .It's obviously that just IT education usually starts innovations in methods of training and if IT-educators of different countries, regions, cultures could have easy way for cooperation, discussion than progress in searching and implementation of new effective educational environment, methods of training, using of the best experience will come faster. In order to make IT-education really international and effective there was set up the International Association of Information Technologies Education (IAITE). IAITE was founded in 2009 by initiative of participants of EU Tempus project "Higher IT Education: International Approach" and was supported by universities, IT-companies, individual lectures from Russia, Kazakhstan, UK, Estonia, Poland. The mission of IAITE is international cooperation in the sphere IT-education with the aim of improvement quality and effectiveness of IT-training for international labour market. Institutional or individual membership in IAITE is free, on-line registration could be made at official web-site: www.iaite.sstu.ru. First results of IAITE education could be seen in collective book written by authors from EU and Russia "Modern IT-education: International Approach" which describes experience of building curricula and courses leading to double/joint Russian-European diplomas in IT as well as in publishing of 20 textbooks for modules in Software Engineering, Information Systems which were prepared for Russian universities on the base of EU universities experience.

Index Terms – Information Technologies, International Association, double degree curricula, cooperation.

Moving towards global informational and Hi-Tech society IT-educators should develop curricula and courses content which satisfy not only the specific current needs of the local region but reflect the actual aims of international development. Traditionally university graduates in IT field are real participants of international labour market. Their diplomas are easier recognized by foreign companies than of graduates in other fields. At the same time very common is the situation when universities follow old standards in preparation IT-specialists trying to fulfill local needs only having no information about the ways of building joint courses with foreign educators. Experience evidently shows that each country has its own educational institutional structure, quality standards and the first step in building real academic cooperation it's necessary to understand peculiarities of educational laws and traditions of all partners. For example, in order to develop joint or double degree curriculum with UK university it's important to take into consideration principles of QAA

demands as well as local university traditions. Experience of the development of double degree curriculum for the professional course (so called CPD in Great Britain) "Web-based Technologies" with partners Saratov State Technical University (Russia) and University of the West of England (UK) showed that in order to develop and implement such course it's necessary:

To understand ways of training and quality control in each partner university;

To understand principles of knowledge assessment;

To agree on such issues as admission criteria, language of training, type of diplomas.

'Web-based Technologies' course was developed with financial support of BRIDGE programme and it was realized during 1 year. The course took place at Saratov State Technical University. It was decided that the training will be in Russian but the final exam should be in English because the results should be approved by the academic board of the University of the West of England. One must mention important thing: the university-partners must trust each other.

Experience of Russian universities in building academic or research partnership shows that usually it takes approximately two years in order to make necessary preparations for implementation of joint / double diploma course and each university makes its own mistakes in the process of development of international curricula. The problem is that in Russia there is no organization which accumulates international experience and could share it with Russian higher schools interested in building cooperation with foreign universities. Setting up such organization could help Russian educational system to activate processes on improvement of the quality of education by implementation of international curricula.

Information technologies today are the most rapidly growing business and education in IT-field must follow the modern technologies. IT-business is very internationally oriented and usually university graduates try to build international career. Typical path of Russian regional university IT-graduate's trajectory is: local regional company – Moscow or St.Petersburg company – European company – US company. If Russian graduate has not only Russian university diploma but international one as well it will help to build successful professional career in foreign company.

In order to make IT-education effective and internationally oriented universities should investigate not only modern information technologies, software but specific demands of various countries and industries and their IT level as well as their academic experience. The problem could be solved by effective international collaboration and exchange of views, ideas.

It's obviously that just IT education usually starts innovations in methods of training and if ITeducators of different countries, regions, cultures could have easy way for cooperation, discussion than progress in searching and implementation of new effective educational environment, methods of training, using of the best experience will come faster.

In order to make IT-education really international and effective there was set up the International Association of Information Technologies Education (IAITE). IAITE was founded in 2009 by initiative of participants of EU Tempus project "Higher IT Education: International Approach" (Saratov State Technical University, Novosibirsk State University of Economic and Management, Astrakhan State Technical University, Russia; University of the West of England, UK, Tartu University, Estonia, Epole Technological University, Poland) and was supported by leading Russian and Kazakh universities, IT-companies, individual lectures from Russia, Kazakhstan, UK, Estonia, Poland. The initiative members of IAITE shared their experience in development of internationally based two-level curricula in IT field (Bachelor and M.Sc.) for 'Information Systems', 'Information Technologies', 'Software Engineering', 'Applied Informatics'.

Mission of the IAITE sets up the following objectives:

- improving the quality of education in the IT field;
- the development of innovative educational methods through the active use of modern educational technologies including the best international practices;
- updating of educational and methodological base of educational institutions;
- development of international cooperation in fields of research and education;
- interaction with the international regional and national funds and programs in fields of education and research, development and fulfillment of joint international projects and programs.

The main activities of the IAITE:

- consulting in fields of international cooperation for representatives of higher educational institutions, teachers, specialists in educational management;
- professional training in fields of IT and international management;
- analysis and implementation of international standards of quality assurance in Russian IT education;
- introduction of modern educational technologies;
- methodological assistance to the development of new curricula of Bachelor and Master degrees in IT;
- the development of new curricula of professional additional education and retraining in IT;
- marketing research;
- organization of educational exhibitions and fairs, competitions, seminars and conferences in IT field;
- research and development activities in the field of natural, human and technical sciences.

Institutional or individual membership in IAITE is free, on-line registration could be made at official web-site: <u>www.iaite.sstu.ru</u>. First results of IAITE activities could be seen in collective book written by authors from EU and Russia 'Modern IT-education: International Approach' [1]which describes experience of building curricula and courses leading to double/joint Russian-European diplomas in IT as well as in publishing of 20 textbooks for modules in Software Engineering, Information Systems which were prepared for Russian universities on the base of EU universities experience. The books are available at IAITE site. Today members of IAITE prepare several training courses like 'Principles of development of joint /double degree courses with UK universities', 'Peculiarities of British higher education', 'Peculiarities of Estonian higher education'. IAITE start training of Russian educators giving them knowledge about implementation of European curricula in Russian universities. Joining of new international participants who could share their international experience will help to increase the activities of IAITE.

REFERENCES

[1] Bolshakov A., Dolinina O., Gubenkov A., "Modern IT-education: International Approach", Saratov, 2009, p.256.