



**PARTICIPATION OF VTU /HIGHER SCHOOL OF TRANSPORT/
“T.KABLESHKOV” IN THE INTERNATIONAL PROGRAMS OF
VOCATIONAL EDUCATION**

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One of the main priorities of European commission is vocational education of the United Europe citizens. The education adaptation to the continuously changeable necessity of the labour market, to the improving of methods and means of training, internship etc. makes easier vocational education and its implementation, as well the development of labour efficiency, professional realization, mastering new professions. Activities with the equivalent Bulgarian participation are realized principally through the next two programs – “Leonardo da Vinci” and “Socrates”. They practically unite all age groups of the population and professional trends. It’s obvious that European Community has got well organized structure of defining priority directions named herein, which has to realize the program activities. Competitions are announced every year and all necessary information and documentation for project applications is published in special Internet sites. These information is disseminated in European Community languages and serves both applicants for the competition and independent valuers . EC helps partially the best estimated projects, granted them financial support for their realization. On the base of free competition financial allocation of the budget, voted and dispensed by European Commission, is accomplished.

VTU is taking part in the programs of vocational education “Leonardo da Vinci” and “Socrates” after the demilitarization of the school in 2000 and its incorporation in the structures of Ministry of Education and Science when such kind of institutional engagements became possible.

The present report aims to review a part of school staff activity in the European programs of vocational education development and draw a short balance.

The preparation of the project application is a very responsible activity which traces out application’s future. There wasn’t a strict frame and instructions for successful project application.

The originator usually takes the leading role at all stages of a successful application: idea, control, development, report.

During the period 2000-2005 VTU "T.Kableshkov" is taking part in two piloting projects of the program "Leonardo da Vinci": "Computer Laboratory for Natural Studies Education" and "Instructor for Drivers' Training". In the spring of 2000, before the demilitarization of the school as a result of intensive dialog with Mr. Slavko Kocianchic, Lecturer in the Pedagogic Department of the University in Ljubljana, Slovenia, a three-year priority project application was presented with title "Computer Laboratory for Natural Studies Education". The application was very well estimated and its realization was undertaken. This activity was held on the territory of 7 educational organizations in Europe – Slovenia, Lithuania, Cheska Rep., Slovakia, Spain, Greece and Bulgaria. As a consequence of our joint work a system of computerized registering of physics-mechanical quantity in different areas of education was worked out and successfully tested, for example, in Physics, Biology, Biomechanics, Chemistry, Electrical and Mechanical Engineering. The system consists of universal hardware and software. This system gives parallel starting/switching on and control up to 8 receivers of physics-mechanical value, visualizing the registered results, mathematical machining/or copying in case of necessary specialized software mathematical processing. System can be accomplished with low powered electromechanical operated control. For the needs of the students software for animation of characteristic/ typical physics and mechanical processes was developed. It was worked out Internet based educative stuff including experiments carried out in laboratory conditions. Developed materials took place in Internet not only project participants use but at other school centers, too. Every partner acts in the field of his narrow specialization. As a consequence of the joint activity of all international partners the main idea of the of the project coordinator was fulfilled: demonstration of unity of natural phenomena and their reflection in different fields of science.

As a partner of the project VTU has the possibility of developing its necessary equipment. Modern devices for computerized registration of physical-mechanical quantities in the Laboratories 'Machine elements', 'Physics', 'Electrical engineering' and "Electrical Power Engineering" were provided, as well Internet connection line to the students hostels. School matters for supporting laboratory exercises were produced. School staff increased qualification taking part in 9 international meetings and science forums (two of them organized by VTU).

The project Computerized laboratory in science and technology teaching was estimated at a high level from European commission. This helped VTU in proving European level of education in this field and present a successful hostage in the international project mobility.

In April 2005 on the school territory was held training in computer registration of physics-mechanical quantities of the trainee group from Spain. Interests in adopted technologies for the needs of doctor's degree training were shown also from colleagues of the Institute of Mechanics of Bulgarian Academy of science. This project continues with the dissemination results between wider range of users. We received an offer of demonstration of these worked out technologies during the Plovdiv Fair 2005.

In the field of the staff fro transport education VTU tares part in the piloting project "Instructor for drivers' training". This project is aimed to decrease road traffic

accidents in the countries of European Community by improving, up-dating and unifying staff training, responsible for drivers' education – instructors. Automobile number's increasing in Europe and traffic intensification are the reasons for traffic accidents increasing and damages are figure out at 130 billions a year. Well trained instructors, qualified on identical school syllabus and similar school stuff, estimated on unified professional criteria will have the right of teaching to new drivers with good all-Europe skills of motor vehicle driving. As a consequence, traffic accidents decreasing is expected, as well of the victims' number and road damages.

Such grounded ambitious objective of the project is being decided by an international team of 11 partners from 9 European countries – Slovakia, Cheska Rep., Spain, France, German, Italy, Greece, Finland, and Bulgaria. The tasks of manufacturing and production control are disseminated between the partners following the complex of complicated but logical scheme of the project management. The VTU staff was engaged with the controlled functions aimed at the working package of proposing admission requirements for the future instructors as well with the assessment of conducting the exams for professional driving licence. All activities were performed independently from the partners with intensive usage of Internet technologies. For coordination of the tasks' report and admission of the developed products, giving new tasks and terms of performance, some working meetings were organized, one of them in VTU. Wide range of partners, as well their additional engagements, brought to the failure of non-fulfillment before the dead line of the project. When the pressure reached the limit the VTU on disposal, having enough recourses, helped for the task accomplishment for the French, German and Finnish partners, elaborating a part of their materials.

Teacher staff of VTU also took part in Socrates program. Their participation is realized in Grundtvig program of adult education in more common thematic projects including non-governmental sector (Researching Projects of European and Atlantic Integration organization). Two projects were realized successfully – “Light cognitive characteristics' which was aimed at establishing all-Europe relief means of enterprise encouraging (financed by Grundtvig II) and “YARD for developing and experimentation of modern forms of working with the youth in small inhabited communities (Grundtvig I).

For the last 4-year period of participation in the programs of professional realization and development of the team work, the project participants were always supported by the VTU administration. It could be seen in activities for the international meetings' organization, accommodation of the participants in the hotel managed by VTU body, in all administrative, planning and budget reporting activities on the project. Methodological support was held from the Human Recourse Development Center, which is the representative of the programs named herein in Bulgaria.

Due to successful activities of International work in the European programs of professional training development, we have a useful experience in that kind of project work. At the beginning of the first project some individualism of the lecturers, some distrust about the necessity of these programs, unwillingness of participation and a fear of taking the responsibility took place.

At the moment, on the stage of administrative preparation for beginning, some offers are proceeding which have been successfully rated by international valuers.

Another forms of international contribution of the school have been sought-after with the help of non- governmental sector.

A general question about the international project work financed by European community is clear: who gains from their realization. The short answer is: the trainees win. The following turns out as a result of complex impact and accumulation of the factors' influence:

- Improving of the necessary equipment, modern technologies and educative matters usage; This is not only an important fact for new knowledge teaching, inaccessible without new technologies implementation, but for students' sensation of using technologies equal to those in the European training centers;

- Teachers' training development, self-confidence increasing and gaining experience in international forms additionally increase their authority before the students.

In all generalized experience we can affirm, that successful participation in the European Programs of Vocational education development is one of the ways of improving education in VTU and equalizing its quality to the prestigious educational centers in Europe.