



ELECTRONIC FORMS OF TRAINING – OPPORTUNITIES AND PROSPECTS FOR

TODOR KABLESHKOV UNIVERSITY OF TRANSPORT

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Abstract: *The main objective of the National Strategy for Lifelong Learning is the successful social and career realization by improving conditions for equal access to education and training, and developing the system for lifelong learning. The strategy promotes innovations and entrepreneurship as a key element of knowledge economy. It defines the opportunities and challenges for developing the higher education in Bulgaria.*

The paper discusses a concept for the development of electronic forms of distance learning as a necessary condition for adapting the education to business needs. In current market conditions, the contemporary universities have to efficiently combine education with business in order to meet the challenges of the labor market.

Key words: *electronic forms, distance learning, education.*

INTRODUCTION

The problem of providing employment and economic growth is associated with the main objective of the Lisbon Strategy for ensuring competitive knowledge-based economy to provide sustainable economic growth with more and better jobs. The strategy promotes innovations and entrepreneurship as a key element of knowledge economy. It defines the opportunities and challenges for developing the higher education in Bulgaria.

The main development trends are related to:

- Knowledge and innovations for growth;
- Europe – attractive place for investments and jobs;
- Creation of more and better jobs.

The changing and dynamic economic environment imposes constant improvement of qualification and acquisition of new knowledge and skills, aiming better adaptability and adjustability to the needs of labor market.

The main objective of the National Strategy for Lifelong Learning is the successful social and career realization by improving conditions for equal access to education and training, and developing

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the system for lifelong learning. One of the main priorities is associated with the improving of the labor market conditions by ensuring high levels of employment and developing educational systems.

THE TODOR KABLESHKOV UNIVERSITY OF TRANSPORT EDUCATIONAL POLICY

The main objective of the contemporary Bulgarian universities is not only to provide new knowledge, but to be modern higher schools that operate efficiently.

In the Bulgarian educational market participate 53 higher schools, among which 31 state owned and 22 private higher schools. There is strong competitiveness among them for attracting more prospective students. The guarantee for success comes from the good quality of the offered educational service, the university vision and educational policy.

Todor Kableshkov University of Transport, having 90 – year –old history, is a key player on the educational market. It has considerable experience in the training of transport specialists from all educational and qualification degrees and according the opinion of the managers of the big transport companies is the biggest academic and research transport centre in the country.

The university's educational policy is based on mission, objectives and strategic goals. It is addressed to the society needs in regional and national aspect.

Todor Kableshkov University of Transport main objectives:

- To provide its students with up-to-date knowledge and skills suitable for the modern marketplace and prospects for country and society development;
- To promote intellectual and spiritual personal development through free exchange of knowledge and ideas;
- To prepare its students for professional realization, including lifelong learning;
- To create new scientific knowledge, applied products and technologies for the society prosperity;
- To sustain an integration between education, scientific researches, innovations and practice;

According the up-to-date official data in Bulgaria only 1.3% from the population of working age (25-64 years) is involved in some form of lifelong learning, having stipulated in Lisbon Strategy for EU – 27 a figure of 12.5% for 2011.

Regarding this, it is very important an efficient lifelong learning system to be established and developed that will stimulate the constant “self improvement” and to facilitate employment mobility, for instance via applying appropriate didactic tools and contemporary forms of training – distance, electronic, etc.

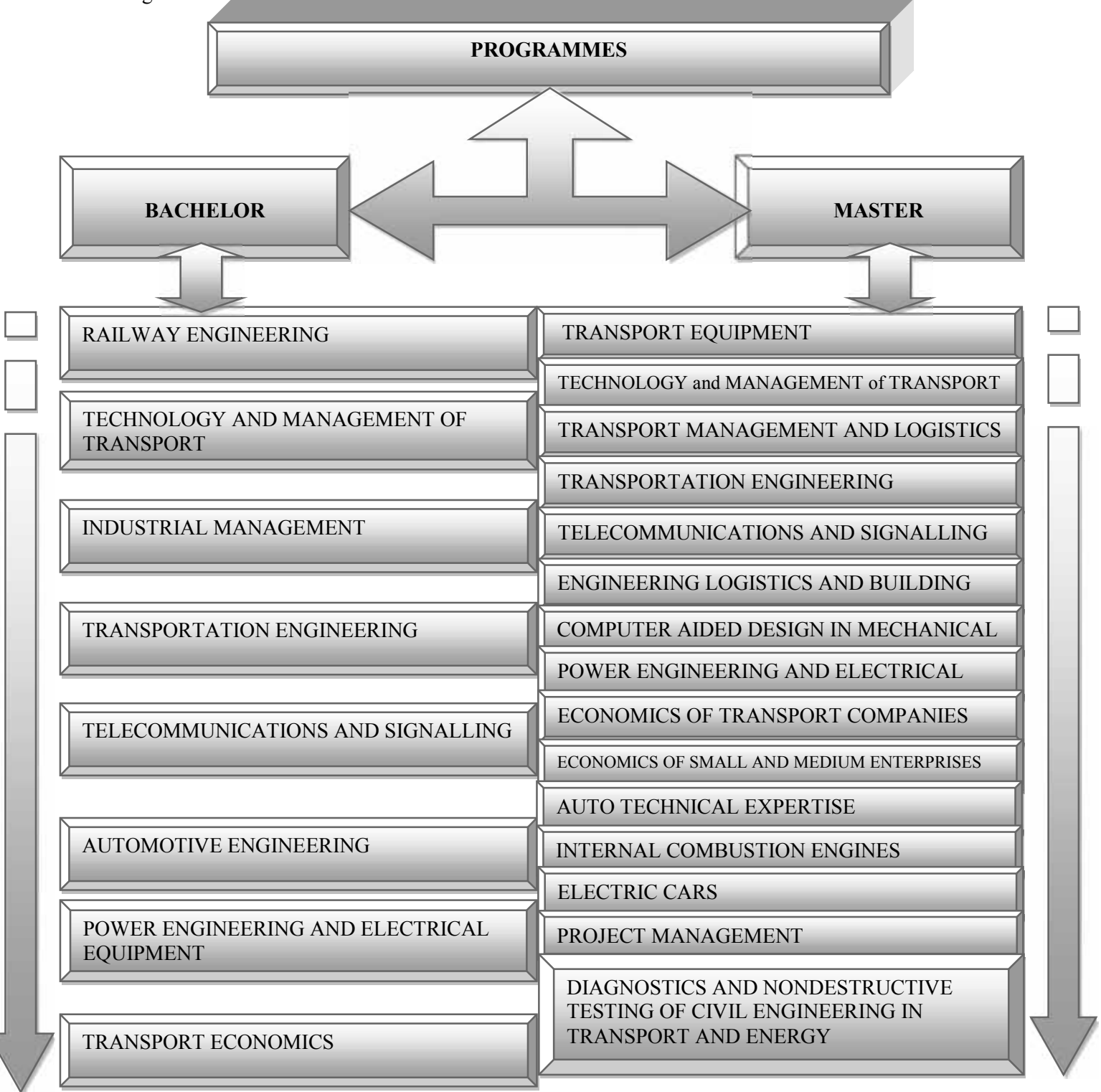
The eLearning development is in line with the development policy of Todor Kableshkov University of Transport, namely:

- to develop and modernize educational process by means of new forms, methods and technical appliances, to enhance quality of education;
- to orient the education towards business requirements through maintaining stable relationships with companies, professional organizations, governmental and non-governmental institutions;
- to provide opportunities for lifelong learning and qualification.

During the academic 2011-2012, Todor Kableshkov University of Transport trains 2359 students in two sectors of higher education:

- ✓ Social, Economic and Law Sciences;
- ✓ Engineering Sciences and seven professional trends:
 - Economics;
 - Mechanical Engineering;
 - Electrical Engineering, Electronics and Automation;
 - Communication and Computer Engineering;
 - Transport, Navigation and Aviation;
 - Architecture, Civil Engineering and Geodesy;
 - General Engineering

The BSc programmes are nine, the MSc programmes that expand and deepen the students' knowledge are fifteen. Those students that would like to continue their studies in the third degree of higher education and engage with research, there are available twenty one PhD programmes.



Every year the interest of the prospective students to the training in the programmes, offered by the University of Transport is stable, as this consistency is determined by the following factors:

- High quality of training;
- Substantial professional training, appreciated by transport companies;
- Acquisition of professional qualifications for executive positions;

- Guaranteed realization in the system of transport sector: automotive, railway and public transport, metropolitan, transport companies, telecommunication and construction companies, forwarding companies, electricity distribution companies, etc;
- Opportunities for stipends under contract with transport companies against commitment for employment;
- Carrying out internships in transport companies;
- Well-developed university infrastructure: academic halls, laboratories, library, students' hostels, canteen, sports complex, wireless internet, etc.

The admission of students at the University of Transport is relatively constant, as during the last years there is an increase in the admission of students in educational and qualification degree of Master (Table 1, Figure 2). This is due to the offering of attractive and useful master programmes that have particular specialization and specific focus.

The MSc programmes have huge interest, because during the last years the transport companies, led by the idea of reducing the number of the staff, develop job descriptions that include both engineering and economic qualification.

This is inspired by the Law on Higher Education for combining and upgrading the broad bachelor training with subsequent specialization in educational and qualification degree of Master. The European practices are the same.

Table 1

Year	Bachelor	Master	Total
2009	640	295	935
2010	577	284	861
2011	594	349	943

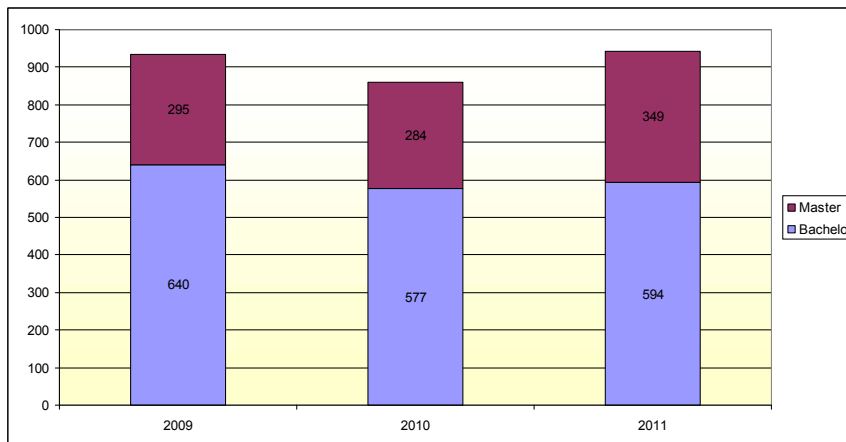


Fig. 1

The students at the University of Transport may be allocated according different features (table 2):

Table 2.

	Total			Age (years):					Form of training	
	Total	Men	Women	Up to 25	Up to 30	Up to 35	Up to 40	over 40	regular	Part-time
Number	2359	1631	728	1605	327	134	115	178	1030	1329

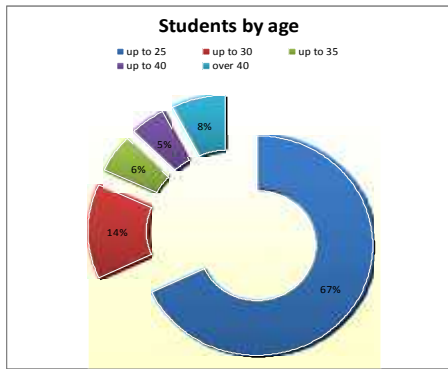


Fig. 3

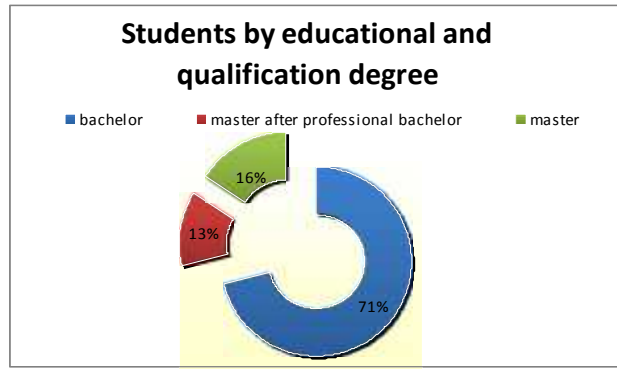


Fig. 4.

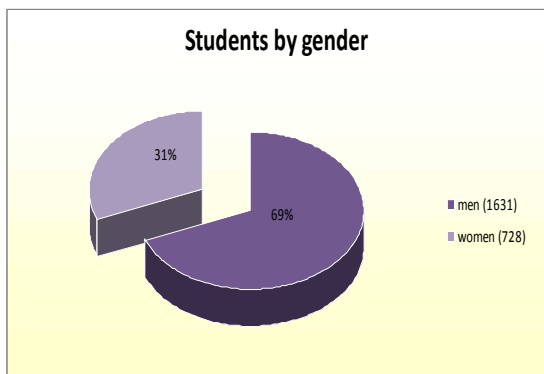


Fig. 5.

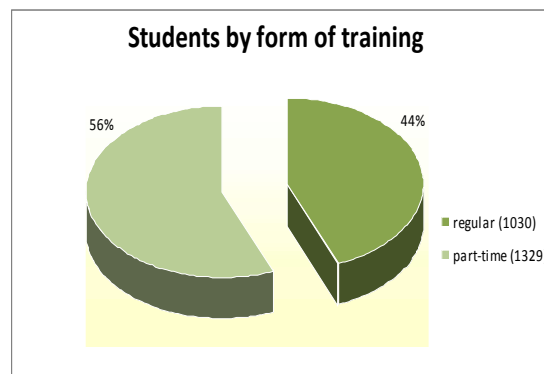


Fig. 6.

The lecturers at Todor Kableshkov University of Transport are 135, among them 61 are professors and associate professors, 17 assistants with PhD degree and 57 assistants. Most of the lecturers at the university are proven experts, recognized nationally and internationally. Their high expertise guarantees the quality of training.

The University of Transport actively participates in I-University /I-Bulgaria/ project. Through this participation, new computer halls are equipped. The student training is carried out by means of latest computer technologies. Television and video equipment, diaprojectors and multimedia are widely used in the training process. There are developed electronic books, integrated new computer technologies: web page for eLearning; electronic blackboards, allowing digital recording in real time; computer programme for monitoring and controlling the students PCs from the lecturer's computer.

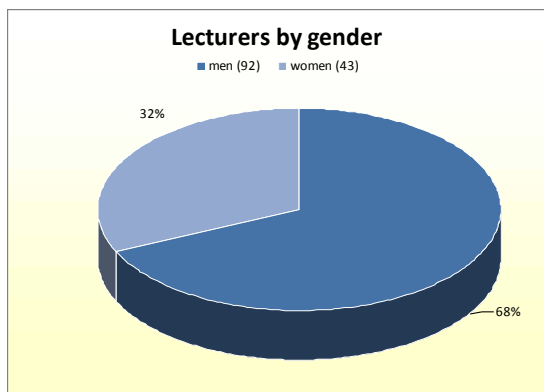


Fig. 7.

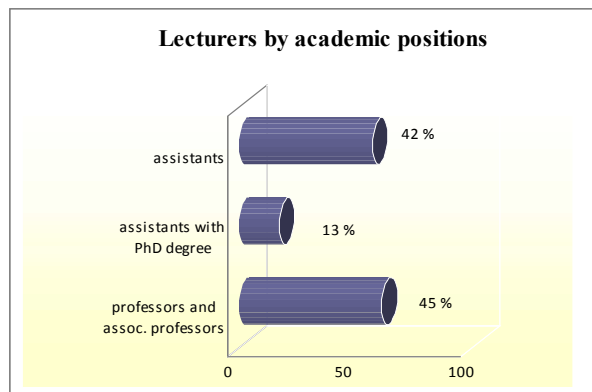


Fig. 8.

It should be noted that the interest in part-time training has increased during the last years in the University of Transport. The concrete reasons for this are the general economic situation in the country and the willingness of students to combine work with education. Unfortunately in our days

very few students can afford to deal only with training. To cover their student and living expenses they need a part-time job. These reasons justify the demand for other forms of training that allow more freedom in the time for preparation and training implementation.

The interesting symbiosis of the traditional for our higher schools forms of training and the innovative approaches for dealing with new challenges allow modern and flexible educational approaches to be applied.

The development of electronic forms of distance learning at University of Transport has several major objectives, including the following elements:

1. creating conditions for developing electronic forms of distance learning, adapted to certain educational needs and providing opportunities for self-planning and developing of flexible learning pathways in the university.
2. creating accessible educational environment and efficiently involving in the learning process individuals at geographic distance or with special needs.
3. developing University Centre for providing electronic education and services, with ensured human and material resources.
4. preparing sufficient number of university lecturers and experts that will apply electronic methods of education.

University Informational and Telecommunication Centre has been created at the university that will administrate, coordinate and assist the organization of training through electronic courses. Through its operation and services provided, the centre helps to improve the accessibility of the educational infrastructure and to create the conditions for equal access to education and training.

In 2005 the University of Transport commenced development of system for eLearning. The system is installed on university web server and loads on <http://moodle.vtu.bg>. There have been chosen the most spread platform for direct and distance learning MOODLE that is widely used in higher schools and offers good conditions for communication between lecturers and students. For this system is typical that it has wide range of opportunities regarding designing courses, integrating electronic materials and has great options for control and verification of students' knowledge, communications, consultations, forum, statistics and many others.

Currently, the system has developed courses for 25 academic subjects, serving the education of students from all professional trends. The system is developing with more electronic courses, textbooks and manuals and tests for self-control and training. The system is in line with the idea of lifelong learning. There has been integrated the foundations of electronic and flexible distance learning. A system for development, integration and maintenance of latest technologies in education is in process of development. This system includes:

- Web – technologies of lecturers' activity (lectures, seminars, current monitoring of student activity, test system for assessment, etc), for instance Modular Teaching System – a complex system for computer training,
- Network based, electronic applications for the needs of training is some of the professional trends – accessible through the local students' network 24 hours per day, aiming to provide self-preparation and verification of knowledge.
- Multimedia products by courses.

It is necessary to note that Todor Kableshkov University of Transport is one of the founders of the Bulgarian Virtual University and is member of the Virtual Faculty. In order to improve the conditions for education and self-preparation of regular and PhD students, it is envisaged an equipment of computer laboratories with priority orientation to electronic and foreign language training.

What are the main impediments to the development of e-Learning at Todor Kableshkov University of Transport?

The answer of this question includes several moments:

- The potential of the eLearning software is not known. Also how to use the system;
- Lack of more available electronic courses, because of tough development;
- Development of infrastructure, equipment and provided electronic services;
- Lack of legal regulation on copyrights ;
- Not regulated pay system, etc;

E-learning is natural response to the needs of contemporary student for flexible training, accessible anytime and anywhere, for which preparation, conduction and management are used contemporary computer technologies. The development of good university informational infrastructure is important condition for the development of E-learning. Another important factor is the construction of structure for consultations and support to the academic staff in designing and carrying out e-learning. To prepare the academic staff deal with and fully exploit the potential of e-learning is crucial to the overall idea of e-learning.

Todor Kableshkov University of Transport applied with a project for developing e-learning that envisages this kind of training to be enhanced, especially in the MSc programmes. The students in this educational and qualification degree are appropriate target group, because the training in most courses (especially the economic ones) allows electronic forms of training, control and assessment of knowledge to be used. The electronization of learning process will improve the quality of education and will give opportunity to students to use course materials in convenient for them time, not limited by the classes schedules.

The biggest advantage of e-learning is the freedom it gives and opportunity for the student to study in convenient time.

There is great number of reasons of different character that motivate the students to choose the electronic form of training.

E-learning is economically attractive for the universities and for the potential students for the opportunities of:

- Quick and easy access of students and lecturers to course materials anytime;
- Interactive training;
- Measurability of students results;
- Increasing the efficiency in assessing through option for automatic assessment;
- Turning the university into attractive place for students;
- Increasing the access of people with special needs to training;
- Improving the opportunities for distance learning.

Being the only higher school, specialized in the field of transport, in Bulgaria, Todor Kableshkov University of Transport aims to promote the lifelong learning process via the development of electronic forms of training. Thus opportunities for improving the professional skill and competences, without long absence from work, are provided.

CONCLUSION

Now and in future the main actions and priorities of Todor Kableshkov University of Transport are aimed at training students with high competitiveness, expanding relations with practice, achieving good university informational provision, expanding the range of research and creative activity, participating in the implementation of national and international projects, attracting new partners and implementing students and lecturers' mobility.

Development of electronic forms of distance learning is a necessary condition for adapting the education to business needs. In current market conditions, the contemporary universities have to efficiently combine education with business in order to meet the challenges of the labor market.

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