

# **INTRODUCTION OF BILINGUAL EDUCATIONAL PROGRAMS IN TAMBOV STATE TECHNICAL UNIVERSITY, RUSSIA**

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## **1. Introduction**

Tambov State Technical University was founded in 1958. Over nearly 50 years of its history it developed expertise in many key areas of engineering education, particularly in chemical engineering, information and communication technologies, and electrical and electronic engineering. Nowadays the vast infrastructure of the university includes 4 institutes, 10 faculties, 2 innovation technology centers, research centers and laboratories, and Tambov Regional Center for New Information Technologies. TSTU offers approx. 30 degree programs to 7,000 students at undergraduate and postgraduate level.

## **2. Motivation for bilingual education**

The current situation in Russian economy calls for major changes in the system of professional education. The primary aim of universities to form and deliver highly qualified specialists for modern industry becomes as important as it has never been before. Competitiveness and success of university graduates at a labor market is seen as a key goal of educational programs. In this respect TSTU is seeking new ways of enhancing its courses and programs of study in order to produce up-to-date trained, flexible and broadminded professionals.

One of such ways is offering students a possibility to learn a profession and a foreign language within one educational program. The need for the introduction of bilingual programs is clear: with ongoing globalization of modern society and extensively growing international contacts and relations of Russian businesses, excellent command of foreign language and appropriate terminology is one of the prerequisites of professional success. Thus, the aim of bilingual program is to prepare specialists being able to freely communicate and carry out their professional responsibilities in two languages, i.e. to develop professional bilingualism. A survey conducted among the current students of TSTU proved that they showed great

interest in learning foreign languages (approx. 60% of informants were already taking additional language classes) and their main objective was future career success. This interest was also reflected in rather high application rate for bilingual programs in this year admissions.

Beside the clear marketing drive, bilingual programs have a lot to offer in the sense of increasing the overall quality of student training. They provide natural environment for language acquisition, which is certainly likely to result in better knowledge of L2. Yet, the main advantage of the integration of content and language learning is synergy: simultaneous building of a bilingual knowledge base in a subject and development of linguistic competency along with the increase of academic and professional competency. Only being dual-focused will such programs succeed. Thus, intensification of language learning should not be the sole reason for the introduction of bilingual education.

For certain academic fields L2 medium education can be said to be indispensable, as they originate and widely develop in countries over the Russian border in languages other than Russian. This is especially important for engineering science. In such branches of engineering as Computer-Aided Engineering, Mechatronics, etc. up-to-date literature is available mostly in foreign languages, particularly in English. Having the opportunity to study it within the bilingual curriculum students will receive “first-hand experience” of those disciplines. The same applies to some branches of economics, for example, Stocks and Investments, Marketing, the need to study which has arisen due to the changes in Russian economic system.

Besides, integration of mostly interactional in its nature language learning with subjects traditionally taught in transactional manner can intensify introduction of new methodological approaches to teaching those disciplines.

And last but not least, bilingual educational programs serve as an excellent framework for students and teachers academic exchanges. Everyone agrees on the usefulness of study abroad for broadening one’s horizons, gaining new academic and life experiences and putting a cornerstone for future, probably international, career. International mobility of students and teachers also contributes to the overall internationalization of university life, which is nowadays globally understood as good practice in higher education. But very often poor knowledge of foreign language by otherwise bright students is a clear obstacle for them being recommended for an exchange program or study abroad scholarship. With bilingual training

of students at a home university we are preparing them for participation in such programs, making a semester or two spent abroad a clear gain, not a stress to a student. The best variant will be integrating a study abroad period into the curriculum, when the duration of exchange, the amount and content of courses studied during exchange and credits and/or qualifications obtained at partnering institutions are previously agreed upon and correlated with the home program of study.

### **3. Implementation of bilingual programs at TSTU**

All the above-mentioned considerations served a ground base for the development of bilingual programs at TSTU. Center for International Professional Training (CIPT) has been established and this academic year it admitted its first students. Currently two five-year degree programs are offered in English language – Computer-Aided Design Systems and Economics and Business Management. These two were chosen for their high popularity with students and the added value L2 medium instruction may bring them. The choice of English as the language of instruction is obvious – the knowledge of this present lingua franca is almost a required competence, hence the desire of students to learn it. During the admissions applicants had to prove their degree of language knowledge by taking a written test and having an oral interview with examiners. The results were very satisfactory and we are quoting with a good level of students' preparedness to study in L2.

From the very first semester the students will be offered several courses taught completely in English language. The intensiveness and degree of complexity of these courses will be increasing gradually from the first to the last year of program. For example, in the first semester economics students will have 74 hours of L2 medium subjects mostly from the cycle of general disciplines (History, Mathematics, Informatics), in the second semester there are planned 130 hours for disciplines of the general professional cycle (Theory of Economics, Enterprise Economy, Progressive Technologies). In the following years more subjects of specialization cycle will be offered and by the end of the program students are expected to write a graduation paper in English in their area of specialization. This way we are trying to assure gradual building of students' L2 skills in terms of their knowledge of subject-specific terminology and ability for professional communication. And there still remains a role for pure language teaching in the first two years of study as it is required by the state standard for higher education in Russia. The English course will be tailored to the needs and level of bilingual program students and is meant to help them develop general language skills such as grammar, speech production, presentation skills.

Studying a complex subject matter in a language, which is not your native, is indeed a difficult task. Thus educational approaches must be sought to facilitate this process to students and ensure quality of training. We believe that one of such approaches is active use of multimedia and information technologies in study process. The teachers are given the opportunity and are specifically asked to make use of all available technologies and visualization means – from using beamers for lecture notes to developing special multimedia textbooks and practice exercises in their disciplines – in order to assure successful acquisition of study material by students.

This brings us to a very important question of who can teach and how teachers should be trained for content and language integrated education. The first obvious requirement is excellent command of L2 by a teacher. The second is methodological preparedness to teach subject and language matter simultaneously. On many occasions it was stressed that language, and especially professional language is not picked up simply through exposure. From the very beginning the whole educational process should be oriented towards two goals – knowledge and language acquisition. Teachers require specific skills for handling such mixed ability classes. Those teachers who are accustomed to largely imparting information during classes have to be trained to implement interactive teaching techniques, for example, motivating students to ask more questions, organizing class discussions and teamwork exercises, etc. Special attention must be paid to assessment: it too has to be integrated in terms of checking the level of content and language knowledge in a subject, and special procedures and exercises must be developed.

As for language knowledge, we are attracting those teachers and researchers having extensive international experience and active in international projects to our work. Yet, they too need special preparation. In this respect CIPT is actively cooperating with the Center for Continuing Education of TSTU, which is responsible for further training and advancement of qualification of university teachers. It is accredited by the International Society for Engineering Education (IGIP) and conducts engineering teacher training according to IGIP curricula. Due to the work of this center 8 TSTU teachers have been conferred the title of International Engineering Educator ING-PAED IGIP and we are highly relying on these teachers in our bilingual programs. Within the Center for Continuing Education a special teacher training course is being developed in order to give teachers necessary skills to teach through L2. The course will be focused both on developing linguistic abilities such as discussion and presentation skills, and on pedagogical approaches that the teachers can

implement during L2 medium lectures and seminars. Also, several language specialists working with CIPT will be able to offer teachers any necessary help.

#### **4. Conclusion**

Though being at the very beginning of introducing bilingual education in the university, we see a clear place and a high demand for such programs at the Russian market of educational services. They answer both the needs of local students for up-to-date competitive education and the social order for highly qualified specialists for Russian business and industry. For the universities they offer one more opportunity for developing their international contacts and relations and attracting more international students. In the near future CIPT plans to increase its activities in the field of bilingual education by opening new German-language programs, as Germany is the largest Russian trade partner and German is the second most-widely studied foreign language in Russia.