# ON THE ISSIE OF FOREING LANGUAGE TRAINING IN NON LINGUISTIC UNIVERSITIES ABROAD

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Teaching foreign languages for professional purposes is considered to be the priority in updating engineering education in Russia. The ability to communicate in other languages is becoming an integral part of professional competence of any specialist, no difference what field he/she works in. With changing requirements to specialist training there is a need to overhaul the content and approaches to teaching foreign languages, profession focused, to nonlinguistic students. Within the framework of the Project on Modernization of the Language Education in Nonlinguistic Universities, supported by the Federal Education Budget Program for 2009-2013, there were carried out some measures reducing weaknesses of the existing language education system taking into account the world advanced practices. As a result 9 overseas universities (5 European and 4 Asian ones) were analyzed with the aim at identifying approaches to language teaching including content development and methods. 180 courses offered by different universities were reviewed. The obtained results emphasized the relevance of this area for higher education and allowed to follow the dynamics of its development on the world scale; created the foundation to classify the best practices in teaching and learning professional languages and to reorganize approaches to its running.

*Keywords:* language education in Russia and abroad, professional training of engineers, modernization of approaches and updating content of language education in universities, discipline integration.

## К АНАЛИЗУ ЯЗЫКОВОГО ОБРАЗОВАНИЯ В ЗАРУБЕЖНЫХ НЕЯЗЫКОВЫХ ВУЗАХ

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Профессионально ориентированное обучение иностранному языку признается сегодня приоритетным направлением в обновлении инже-

нерного образования. Иноязычное общение становится неотъемлемым компонентом профессиональной деятельности специалистов различного профиля, в силу того, что глобализация мировой экономики и науки требует эффективного взаимодействия на иностранном языке. В связи с этим возникает потребность пересмотра содержания и подходов к обучению иностранному языку студентов неязыкового вуза, что влечет за собой определенные процессы реформирования и модернизации системы российского языкового образования. В рамках проекта Федеральной целевой программы на 2009-2013 гг., нацеленного на модернизацию языкового образования в российских неязыковых вузах, проводится ряд мероприятий по минимизации существующих противоречий и «слабых сторон» университетского языкового образования с учетом передового зарубежного опыта. Коллективом исследователей проведен анализ по 9 ведущим зарубежным вузам с целью выявления подходов к организации языкового образования, структуры его содержания, методов обучения. В результате было проанализировано около 180 курсов по иностранному языку, имеющих в основе ориентацию на формирование общекоммуникативных навыков для осуществления академической и профессиональной коммуникации. Результаты анализа показали актуальность данного направления для вузовского образования, позволили проследить динамику его развития в мировых масштабах, заимствовать передовые практики преподавания профессионального иностранного языка и подходы к организации и разработке его содержания.

*Ключевые слова:* языковое образование в России и за рубежом, профессиональная подготовка инженеров, модернизация подходов и содержания обучения, интеграция предметных областей.

In the light of global economic integration and correlations between countries all over the world supported by multilateral international cooperation, sound knowledge of the foreign language becomes one of the basic competencies for an engineer for efficient implementation of professional activities in the national and international labor market. Due to the above, the issue of foreign language teaching upgrade becomes highly crucial for students of non-linguistic universities.

Upgrade means improvement or renewal of the subject (here teaching foreign languages to engineers), bringing it into compliance with new requirements and norms, technical development of the community and quality levels [1].

Before analyzing foreign language training in universities abroad weaknesses and inconsistencies typical of foreign languages training for engineers in Russia will be reviewed.

One of these inconsistencies is the lack of continuity in the foreign language training system of school and university. Secondary education system is not capable to provide students with required foreign language skills. Thus the foreign language program in a non-linguistic university implies that the knowledge of enrollees will be at least at B1 level (CEFR).

As a result, the university requirements to entering level of foreign language skills are hardly met and universities have to re-train enrollees in what should have been mastered in school curriculum. Placement tests in National Research Tomsk Polytechnic University show that the average level of attainment for enrollees in foreign languages is only 32.3%, which aligns with CEFR Level A2; some students hardly demonstrate CEFR Level A1.

The second inconsistency is constantly increasing value of foreign language skills in Europe, where they make an integral part for engineering qualification whereas in Russian higher education system it is not given much priority, and the evidence of it is the number of guided learning hours of language tuition in technical universities being constantly decreasing.

Insufficiency is shown as the foreign language being underestimated as cross-disciplinary basis for professional competencies development in students of non-linguistic universities, poor integration of subject fields, and it is proved by the approach to development of foreign language training programs, hardly considering results of other various training programs.

However, it would be unfair to state that the existing model of teaching foreign languages in Russia has only weaknesses and shortfalls. Significant positive experience has been accumulated for the last decade, i.e. the capacity for future development has been generated. First of all the increase of students' and teachers' academic flexibility is to be noted, as well as opportunities for joint projects with universities abroad both research and educational, tendencies for development and variance of IT tools for foreign language training with the use of network training resources and open educational platforms. Thus, it can be supposed that teaching foreign languages in Russia will surely achieve improvement of quality and teaching results, and professional engineers will successfully integrate into the international market.

Improvement of foreign languages training in Russia for technical specialists and relevance of the above factors suppose to minimize the noted weaknesses and develop mentioned positive tendencies.

Further existing models of foreign language training in overseas universities will be investigated. Within the implementation of Project on Modernization of the Language Education in Nonlinguistic Universities supported by the Federal Program on Scientific and Teaching Human Resources for Innovative Russia 2009–2013, a group of specialists (the authors of this article amongst them) analyzed and compared existing models of foreign languages teaching in the leading universities abroad.

Main criteria for selection of universities are the following:

- High positions in international ratings of universities, such as Academic Ranking of World Universities (ARWU), known also ad Shanghai, Times Higher Education and OS World University Rating, identifying 500 best universities in the world [1, 6, 8];
- 2) Teaching foreign languages in the university with focus on professional purposes;
- Availability of contacts with universities, personal professional and research;
- 4) Availability of data about university and language training in the Internet.

The final selection included 9 universities, amongst them 5 European universities (Germany, Belgium, Spain), 4 Asian universities (Korea, China and Taiwan), table 1.

University	Position in OS World Universi- ty Rating, 2012 r. [6]		Position in Academic Ranking of World Univer- sities (ARWU) [1]		Times Higher Education [8]	
	World rank	Engineer- ing/Tech- nology	World rank (Top 400)	Engineering/ Technology and Computer Scien- ces-2012 (World rank) (Top 200)	World rank (Top 400)	Engi- neering/ Technol- ogy (Top 50)
Korea Advanced Institute of Science & Technology	63	24	201-300	45	68	44
Ku Leuven (Belgium)	82	175	101-150	51-75	lower 400	40
National Taiwan University	80	28	101-150	26	134	lower 50
The Hong Kong Polytechnic University	159	90	201-300	76–100	256	lower 50
Polytechnic Uni- versity of Catalonia	350	77	lower 400	151-200	lower 400	lower 50
Seoul National University	37	32	101-150	76–100	59	36
Technical Universi- ty of Dresden	288	103	201-300	151-200	284	lower 50
Technical Universi- ty of Munich	53	21	53	51-75	105	lower 50
Ťrinity College, Dublin	67	173	201-300	lower 200	110	lower 50

#### Rating of top universities selected for analysis of language education

The following aspects were compared:

1) Organizational structure of training;

2) Course status (elective/mandatory);

3) Enrollment level of foreign language skills to take the course;

4) Degree of the course professional focus (ratio of general part and specialized part);

5) Methodical support for the course (availability of training materials);

6) Training content (variations for course selection);

7) Training duration and credit value;

8) Teaching methods;

9) Testing methods;

10) Training outcomes.

Table 1

The comparative analysis of foreign languages training models in the above universities expectedly showed that the implementation differs but everywhere the foreign languages are given high priority. University of Catalonia has the procedure on language use, approved in 2010, regulating multi-linguistic issues and language interaction in the university. According to this procedure improvement of the English skills and teaching in English is one of the priority tasks for the university development till 2020 as a part of the education internationalization and globalization. Employees being multi-linguistic, availability of teaching and information materials in all official languages of the university (Catalan, Spanish and English) are recognized as significant advantages, proving international nature of the university. Foreign languages teaching program is aimed at the solution of several tasks, namely:

- Ensure sound language skills in all bachelors;

 Promote the enhancement of communication skills and effectiveness of foreign language competencies in students of all training levels;

- Adapt teaching approaches to buildup global and multicultural mentality in students [12].

Language training is also obligatory for all categories of students in Hong Kong Polytechnic University. More than 120 hours per semester are allocated for this. For instance: first year students take an introductory English course as a base-line to take special language courses the variety of which can reach 70 types. Such attention to language training by the university allows making a conclusion about its paramount importance for integral specialists' training [2].

Main functions of teaching are known to be the following: management, monitoring, organization, methods, content and process. Investigating the teaching process in the university one can see that as a rule the coordination of the first three is centralized. Separate linguistic institutes, linguistic centers and faculties, etc. coordinate the linguistic education in universities. These departments have different status first of all regarding the operational independence and free choice of resources required to fulfill their assignments.

As a rule courses offered by linguistic departments are auxiliary and used for adaptation of foreign students to new academic surroundings and for promotion of main communication skills to communicate in the academic field. Traditionally such courses have no credit value; they are paid and not mandatory.

However, sometime linguistic training is included into educational programs, e.g. in Universitat Politècnica de Catalunya (UPC), Technical University of Dresden (TUD), Technical University of Munich (TUM), Catholic University of Leuven (Ku Leuven), National Taiwan University. Each department has the authority to add the language module, what can be explained by different foreign languages policy and nature of training programs. In these universities upon the decision of university managers the linguistic courses can be included into the curriculum and given the credit value varying from 3 to 9 ECTS [12, 10, 9, 4].

Practically all the courses are elective but for the General English ones for foreign students. For the implementation of additional training courses many universities invite third parties such as private linguistic centers possessing the relevant qualification and required recourses to conduct special courses meeting the needs of students, teachers and teaching programs. Demand for linguistic courses is supported by strict requirements to the level of foreign language skills. For example, for *Universitat Politècnica de Catalunya* the enrollment level is to be at least B1 and for graduation it has to be at least B2.2

Detail investigation of training programs and materials were conducted in order to analyze the training content. Firstly, it is worth highlighting the variance in approaches and subjects of courses. Since this research reviews teaching foreign languages for professional purposes the analysis covered courses relevant to students' specialization or the ones developing special language and communication skills. Several titles of the courses, offered by the universities are set as examples: English for corporate communication, English for international business communication, Academic English for political and social sciences, English for technical purposes, Writing academic research paper, English for environmental engineers, Academic presenting skills, English for technical purposes – industry and energy, Basic English for business and technology, Academic writing, Writing skills for engineers, Active reading, Road to IELTS, Technical writing for computer engineers etc.

On average each university can offer more than 20 training courses. The significant number of courses in economics and business is to be highlighted; the special emphasis is put on business communication. None of the courses has the certain specialization as a condition for students' enrollment, thus one can conclude that the content of the courses is not orientated at narrow scientific or production field.

In order to understand what each training course implies, what teaching goals are set and what tools are used to achieve the goals, the detail description of the content of one training course will be given. This training course was of principal interest for this research. Data are shown in table 2.

Table 2

Course title	WRITING SKILLS FOR ENGINEERING
Subjects	<ol> <li>Resources for academic and professional writing. Using grammar, dictionaries and other online resources to improve writing skills Electronic communication in English.</li> <li>Fundamental aspects of technical writing in academic and professional environments. Problem solving and communicative concept of genre. Audience, purpose and style. Writing as a process.</li> <li>The writing process (I): Planning a technical document. The road planning. Selection of information. Issues of plagiarism.</li> <li>The writing process (II): The draft of a technical document. Paragraph structure and coherence. Patterns for organizing information. Text structure and design of a text.</li> <li>The writing process (III): Review and editing a technical document. Review of the content and organization of information. Review of uses of language, based on the correctness and appropriateness. Review of style.</li> <li>Types of documents for academic and professional communication. Writing Online: «label» and email. The technical reports, correspondence and CV for academic and professional purposes</li> </ol>

Content of foreign language teaching in UPC [13]

Teaching goals and tasks	<ul> <li>Understand and apply the principles of academic communication in the field of engineering;</li> <li>Recognize genres in academic and professional English;</li> <li>Read, understand and interpret written information in English for computer engineering;</li> <li>Plan and organize English texts in accordance with a defined communicative goal, using a sheet of planning and implementing the correct strategy;</li> <li>Manage information in an appropriate way to write a script for a document in English;</li> <li>Draft a document using writing techniques to build a text paragraphs and structure;</li> <li>Write academic and professional texts in English related to computer engineering: technical report, academic essay, technical documentation;</li> <li>Review a draft in English both individually and in a group;</li> <li>Communicate properly and adequately in written English in different genres;</li> <li>Manage and continue learning, using resources and strategies that have been acquired during the year (to develop a portfolio, use resources).</li> </ul>
Methods	Situational-contextual, communicative, activity

After analyzing components and contents of the training courses in the above universities these courses can be classified as follows:

1) Disciplines aimed to develop general linguistic skills (pronunciation, vocabulary, basic grammar etc.);

2) Disciplines aimed to increase competency of students in certain fields (robotics technology, mathematics, architecture, economics etc.);

3) Disciplines aimed to develop communication and academic skill (making presentations, negotiating, writing articles etc);

4) Disciplines enhancing general language skills;

5) Country studying and cultural disciplines;

6) Disciplines aimed to train for passing certification tests.

However, special emphasis on productive speech activity is to be highlighted: 70% of analyzed disciplines are aimed to develop speaking and writing skills. To summarize one can state that the content of foreign languages training in non-linguistic universities is focused on communicative skills and professional purposes, and these professional purposes are not always based on students' majors. More often it is limited to various communication situations which can occur when performing professional duties.

There are very few training courses for specific community of students belonging to certain profession, likewise programmers or nuclear physicists; however this type of training courses is available almost in every university. Below are the examples for certain disciplines: English for architects (TUM), Tutorial legal English (Ku Leuven) Legal English (SNU), English for journalistic and politicians (IUG), English for doctors (IUG), Medical English (Ku Leuven), English in the workplace for the Faculty of Construction and land use students (HKPU), etc.

Unfortunately university websites do not provide full content of these training courses but through personal, research and professional communication with teachers within joint project under EU umbrella one can conclude that these courses are based on communication component integrated with general professional vocabulary.

Adherence to some particular specialty and attempts to develop a language course meeting needs of some specific category of students are not always successful and feasible considering teaching methods. Amongst universities covered by the analysis such practice is available only in Korea, China and Germany [3, 2, 9, 10]. The issue is that the foreign language is taught as a rule by linguistic teachers, who are not qualified in the field of technology or production, consequently one can not expect that the training course will be provided correctly regrading terms and selected text materials. The teacher possessing no knowledge about the subject or having only shallow knowledge is unable to choose the appropriate training materials meeting needs and profile of students and actual science and unable to facilitate discussion for specific professional issues, and thus to organize the teaching in such way for students to be fully prepared to professional activities at the intellectual labor market.

In this case two teachers are to cooperate – a linguist and a specialist; authorities and involvement in students' teaching are to be clearly distinguished. The course is to be integrated and of inter-disciplinary nature. Note that not all universities possess resources to implement such approach. Therefore universities prefer general academic training aimed at teaching and developing skills and abilities required for communication in various situations including professional issues.

The analysis of linguistic teaching model using the examples from above universities would be incomplete if the managerial functions are not covered, i.e. forms of monitoring. It is good to have variance, qualified teaching, technical support but monitoring is important for a university since it is an indicator for teaching effectiveness and results. Forms of monitoring depend as a rule on the course status (mandatory or elective) and its value for teaching program. So if the value is not significant the monitoring is limited by current learning progress. The absence from classes being a serious issue partly solves the problem of teaching effectiveness. For example, in Seoul University coming late for 10 minutes for 3 times is considered as missing one class, coming late for 20 minutes is considered as missing, and being absent from 6 classes during the semester will result in unsatisfactory grade and the course is not considered as passed and no credits are given. If the exercise is not submitted in time, for each day of the delay there is penalty of 10% of final credit [7].

However, if this is a basic training course, i.e. mandatory, then the monitoring would be traditional and comparative to the Russian system. It is done as an exam or testing. A training course for professional purposes is evaluated by students' production. Each program has a final task on which students work during the semester.

As a general conclusion it can be stated that at this stage foreign language training in Russia and abroad have much in common regarding concept update of the contents, approaches and aim orientation. The main difference is the intensiveness of multinational socialization. Thus overseas students have more opportunities for academic flexibility, selection of courses taught by native speakers and social communication outside their universities. Therewith the limitations typical of Russian higher education system can not and should not justify the slow movement towards the best practices of foreign languages training in the world. Russian universities are to provide continuous actualization of content and approaches to foreign languages teaching, training variety, evaluation flexibility, integration of subject fields; training is to be moved closer to real professional tasks of students.

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