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Learner-centered Approach in Teaching Foreign Language: Psychological and Pedagogical Conditions

Dmitry Matukhin*, Daria Bolgova

National Research Tomsk Polytechnic University, 30 Lenin Avenue, Tomsk, 634050, Russia

Abstract

The paper dwells on the psychological and pedagogical conditions of implementing learner-centered approach in teaching foreign language to engineering students at the Tomsk Polytechnic University. The concept of learner-centered approach in teaching foreign language was in detail pedagogically, psychologically and methodologically studied, foreign language teaching regulatory documents in the technical university were analyzed, teaching methods and learning outcomes in accordance with the existing English language teaching methodology were presented, results of the engineering students' questionnairng and key techniques to improve teaching foreign language based on the learner-centered approach were proposed.

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Keywords: Learner-centered approach; motivation; psychological and pedagogical conditions; individualized learning; engineering students.

1. Introduction

Theoretical and methodological research of the domestic and international scholars, concerned with philosophical, psychological, linguistic, general pedagogical and methodological issues of foreign language teaching, has shown that implementation of learner-centered approach in teaching of foreign language at the higher educational institution is a complex and under-researched psychological and educational problem.

Language, with its multiple and complex functions, has long been considered in isolation from humans. As a result, foreign language learning does not involve the language of science as a means of communication and a factor

*Corresponding author.

E-mail address: mdlbuddy@mail.ru (D. Matukhin).

of formation and development of personality, influence of multilingualism on the development of society, and specific features of the foreign language learning. Kapretev (2006) states that language can't be taught, you can only create conditions for its learning and if you can't learn foreign language well, then smattering and poor knowledge of it is useless.

As noted by Brown (2000), starting point of the modern theory of learner-centered teaching is the idea of an individual as a purpose and factor of the educational process; the main objective of an educator is to create the conditions necessary for harmonious development of student's personality in the learning process.

The concept of 'condition' as a philosophical category expresses the ratio of the subject to the surrounding phenomena, without which it can't exist. The subject as something conditional and the condition as relatively external to the subject diversity of the objective world ... The condition makes up the environment in which the latter (subjects) occur, exist and develop (Philosophical Dictionary, 2001).

As for conditions of the foreign language teaching organization in our country, it is necessary to note their 'artificial' nature, that is, foreign language learning is a specially organized, guided process in isolation from the language environment.

The fact that target language in the natural environment is both a means of communication and understanding between people in everyday life reinforces the importance of a pragmatic process of language acquisition and motivates people's foreign language communication activity. However, foreign language in isolated conditions is only an instructional medium which mainly exists as a means of communication in the process of in-class activities.

However, according to Gaskova (2008) mastering of foreign language outside the country of the target language and without immediate contact with native speakers will be efficient, if it gains all the possible characteristics of the natural process of language acquisition, and as close as possible approaches with its main parameters to the conditions of facilitated language acquisition in the natural language environment.

According to such scholars as Crystal (2003), Rubin (2007), White (2006) and Lin (2002), frustration and inefficiency in foreign language learning are directly related to teaching methodology. However, according to our survey, the reasons for this dissatisfaction are more profound. They are caused by poor elaboration of the theory of foreign language teaching as an integration of knowledge in the field of linguistics, psychology and pedagogy. Different methods of teaching foreign languages, arising from time to time, often have some success among the creators only and don't have theoretical basis and scientific-methodological generalizations for the common use in foreign language teaching at the higher educational institution (Matukhin & Gorkaltseva, 2015).

Thus, this paper, contributing to the process of the English language teaching individualization, will identify psychological and pedagogical conditions of the learner-centeredness, analyze current state of the foreign language teaching to engineering students, perform the processing and analysis of the survey, propose crucial methods to enhance foreign language teaching based on the learner-centered approach.

2. Research Methodology

2.1. Theoretical study

There aren't sufficiently developed systemic issues, targets, and didactic support of the foreign language teaching in educational theory at the moment. However, study of the foreign language teaching problems can be approached based on the modern theory of learning which is an essential part of humanistic approaches to learning of foreign languages: cultural, learner-centered, individual creativity, etc. (Obskov, et al., 2015).

One of the features of foreign language teaching is integration of professional and educational activities of teachers with learning and cognitive activities of students. The main functions of a teacher in this process are organization and management of foreign language activities and the objective of a student is mastery of different types of speech activity in the foreign language, continuous development of skills and vocabulary that is mastering 'foreign language experience' (Frei, 2007).

The basis of successful activity as a teacher and a student, according to Yakimanskaya (2004), may be only subject-subject relationship. The greatest progress in the foreign language teaching is achieved due to a large number of training hours for the graduates who major in linguistics. Even in the closed society of the Soviet education, system provided a high level of linguistic, social and cultural training for the graduates majoring in

linguistics. Despite the ideology, the content of foreign language teaching was of humanitarian nature.

Within the discipline of “Foreign Language” students acquire various aspects of human life, natural sciences and social aspects such as geography and ecology, art and culture, education and science, literature and media, etc. Modern language education holds the continuity of humanitarian principles and improves the technologies in foreign languages teaching within the multilingual information environment. However, for many years foreign language has been regarded as a minor and highly-specialized discipline, which was aimed at training highly-specialized skills (Wright, 2006).

In order to study the state of foreign language teaching in the university and conditions of its organization, survey involving the analysis of regulatory documents, analysis of the students’ outcomes, and questionnairng has been performed.

State standard of higher professional education (2010), having revised the content and mode of the foreign language teaching at the higher educational institution determines sufficiently high demands for skills and abilities of engineering students (See Table 1).

Table 1. State standard of higher professional education: demands for foreign language skills.

Sections	Demands for foreign language skills
Pronunciation	Sound articulation, intonation, rhythm and accentuation of neutral speech in the target language; basic features of pronunciation, characteristic of professional communication, reading transcription.
Vocabulary	Basic dictionary of 4000 lexical items and general terminology. The concept of vocabulary differentiation in the field of application (domestic, terminological, general scientific, official, etc.). The concept of collocations and fixed phrases, phraseological items. The concept of the main ways of word formation. The concept of everyday and literary, official and business, scientific style, fiction style. The main features of scientific style. Culture and traditions of the target language, rules of speech etiquette.
Grammar	Grammar skills, providing communication in general terms without distortion meaning in written and oral communication, basic grammatical phenomena, characteristic of professional speech.
Speaking	Dialogical and monological speech, using the most common and relatively simple lexical and grammatical means in basic communicative situations of informal and formal communication. Fundamentals of public speech (oral communication, report).
Listening	Understanding dialogical and monological speech in the field of everyday and professional communication.
Reading	Text types: simple pragmatic texts and texts in accordance with a specialty.
Writing	Types of speech products: abstract, essays, theses, reports, personal letter, business letter, CVs.

However, analysis of the curricula of various non-linguistic disciplines (humanities and natural sciences) shows that the amount of training hours for the discipline of “Foreign Language” makes 16% of the overall unit of humanitarian and socio-economic disciplines, and only 4% of the total number of training hours provided by the curriculum.

Obviously, when there is insufficient total number of training hours in the curriculum devoted to the discipline of “Foreign Language” (herewith, only half of them are intended for contact hours) during the first two years of education, it is almost unreal to achieve the level of foreign language proficiency that meets the state standard.

In addition, adverse qualitative characteristics of teaching foreign language to engineering students should be noted, consisting in a sharp decrease in motivation, both students and teachers; prevalence of the traditional face-to-face teaching methods based only on reproduction of foreign language speech samples; the lack of students’ cognitive interest in the discipline of “Foreign Language” in terms of their specialties (English for Mathematicians, English for Geographers, Biologists, Psychologists, etc.).

2.2. Questionnaire

All of the above confirm the results of a survey among the 2nd year of education engineering students (85 respondents) in the Tomsk Polytechnic University aimed to identify the attitude to the foreign language (FL) state and foreign language teaching at the higher educational institution (Fig. 1-4):

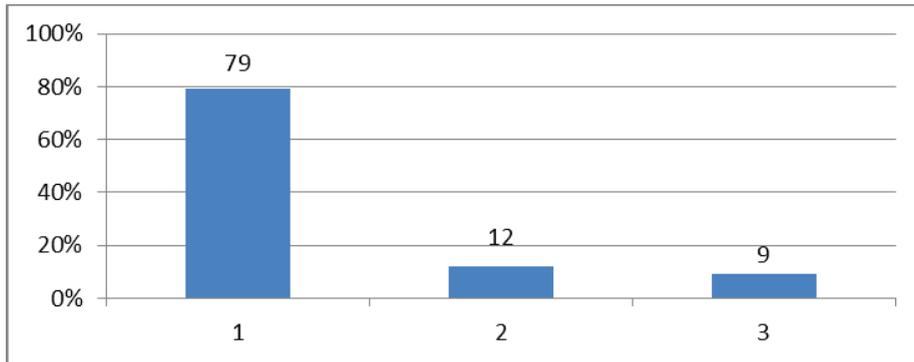


Fig. 1. Awareness of basic FL proficiency under current conditions.

1. Consider it necessary to be proficient in FL under current conditions
2. Do not find it necessary to learn FL
3. Difficult to say

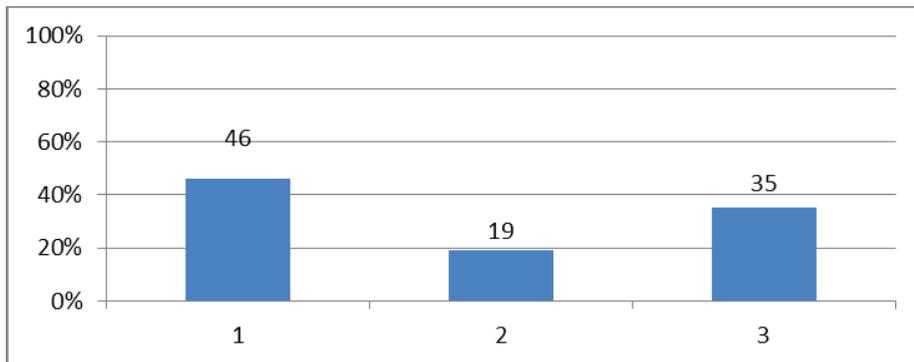


Fig. 2. Awareness of FL proficiency for professional purposes.

1. Consider it necessary to be proficient in FL under current conditions
2. Do not find it necessary to learn FL
3. Difficult to say

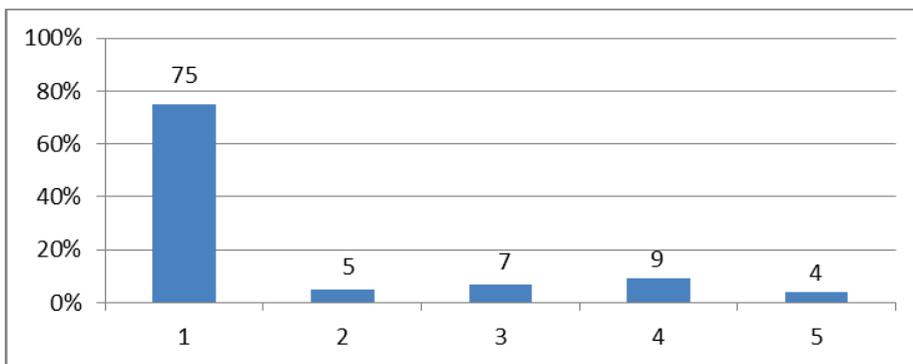


Fig. 3. Organizational conditions for FL learning.

- 1. Full-time learning
- 2. Part-time learning
- 3. Self-study
- 4. Language courses
- 5. Tutoring

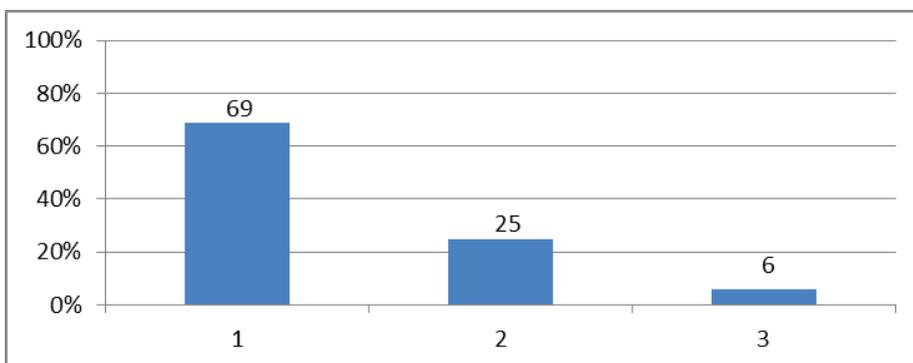


Fig. 4. Overall satisfaction with organization of FL learning.

- 1. Generally satisfied with learning process.
- 2. Generally unsatisfied with learning process.
- 3. Don't know.

As survey data show, most students recognize the need for language skills in modern international, geopolitical and socio-economic conditions, however, a large percentage of students do not realize the importance of language skills for future careers (54%). Many students want to seriously study the foreign language, but a few succeed. Only 25% of respondents seriously study foreign languages in parallel with the university program, mostly doing fee-paying courses. For the majority of engineering students, foreign language learning is a part of higher education programs in accordance with the curriculum (75%), while dissatisfaction with the results is quite high (31%), including discipline volume, learning period, teaching methods, learning tools, content of learning materials, educator's activity.

Most dissatisfaction with foreign language teaching is due to educator's activities (49%) as its main organizer. Face-to-face methods, formalism, lack of subject-subject relationship, complexity and highly-specialized orientation of teaching materials, subjective or inadequate evaluation will inevitably lead to a drastic reduction in motivation and self-esteem of students, which in turn affect the quality of mastering the foreign language.

2.3. Experimental study

As a part of the survey has been carried out a comprehensive testing on all aspects of foreign language activities taking into account the main criteria constituting the development of any language skills:

- Reading (speed, fluency, phonetic accuracy)
- Writing (orthographic, syntactic and stylistic correctness)
- Speaking (fluency, spontaneity, correctness (phonetic, grammatical, stylistic))
- Listening (listening accuracy of information)
- Grammar (implementation of the basic grammar rules)

These tests confirm the results of numerous studies indicating that engineering students at the end of the 2nd year of education (compulsory English course) have particularly low proficiency in the basic foreign language skills, which decreases sharply by the end of the education process due to discontinuity of learning.

Thus, based on the analysis of the nature of the process of foreign language teaching to engineering students, its objectives, content, modes and methods of organization, used educational technologies, products of foreign language verbal activity, the following characteristics can be distinguished (See Table 2).

Table 2. Peculiarities of foreign language learning.

Basic characteristics	Learning peculiarities
Objective	Development of professional communicative competency
Actual learning	Reproduction of teachers' knowledge by the students in terms of simplified problems
Content of learning	A certain amount of mastered knowledge, skills and abilities
Orientation of learning	Highly-specialized
Learning approach	Verbal and bookish
Methodology	Traditional (face-to-face)
Educator's part	Virtually the only available expert in the field and the only source of information
Student's part	Passive; objectives are specified by teacher
Structure of syllabus and course	Rigid, static
Course book	Printed, passive, static, highly-specialized
Supplementary information recourses	Local, limited
Criteria of efficiency	Formal measures of achievement
Organization mode	Individual and group
Organization principle	Discontinuity
Progress trends	Regression

In our opinion, use of the organization principles, modes, methods and technologies of modern language education can serve as a basis for modeling such a process in order to increase its effectiveness. As an important characteristic of the foreign language teaching is continuity; one of the most effective ways to deal with the personal development of students in the process of foreign language learning can be an integration of mainstream and supplementary education in the implementation of learner-centered approach that can play a significant part in reaching by the students the acme of their creative and professional development, choosing the right path in their life.

Thus, in order to optimize the process of foreign language teaching to engineering students it is suitable to use experience and the latest methodologies in individualized foreign language teaching. The content, principles, modes and methods of teaching of foreign language to engineering students should fully consider personal psychological

characteristics and be as close as possible to the practical (not theoretical) component of language education in terms of innovative educational technologies that maximize students' involvement in educational process:

1. Learner-entered approach should provide for cross-curricular integration, i.e. contribution of foreign language learning objectives to common goal of training professionals and coordinated selection of topics and vocabulary. At a higher level it is possible to conduct didactic synthesis and implementation of integrated projects. It effectively synthesizes knowledge of the natural sciences and foreign language, ensures organization of the educational process as a single didactic system, aimed at implementing comprehensive educational tasks and performing integrative educational functions. It is impossible without organizational improvements which require integration of advanced technology into TFL using audio-, video- and computer technology.

2. Special attention should be given to independent study as it creates the continuous process of developing foreign language communicative competency and develops the need for constant self-education. Independent study can be productive only if it is efficiently and carefully facilitated. Teacher scrutinizes personal skills and attitudes of each student to work independently. Given the psychological characteristics of students, an educator selects the type and number of activities as well as required time to each student for independent work (Matukhin & Evseeva, 2014). Organizer of independent study must master a variety of roles: facilitator, information source, consultant and partner who helps only at the request of a student and never imposes his/her decision.

3. One of the key issues of any successful method is a factor of constant focus on its educational purpose, i.e. in order to develop new knowledge, understanding or awareness ensuring the development of new skills or patterns of behavior, there is a need to change the attitude, values, and priorities. Whatever the goal is, strategically it is necessary to use a mix of training methods to achieve the goal, as it will directly affect the nature of training. These techniques, combined with traditional methods, allow increasing motivation, cognitive interest and activity of students in the process of the foreign language learning (case study, business games and simulations, problem- and project-based methods, discussions, etc.)

4. Needs assessment is the process of determining academic and professional commitments of students. Needs assessment can stimulate a situation where knowledge of students' potential will enable the educator to intensify the process of learning. Teacher plans the content of the learning process, but it must be carried out with the adjustments made by students. There is no single way to perform needs assessment of students (Sumie, 2001). It requires a combination of methods to obtain reliable information in assessing students' needs: questionnaires, observations, interviews, group sessions, paper analysis or written tests. The key to success is the trainees' involvement in the needs assessment to define the parameters of the learning process.

5. Assessment of learning outcomes is also important. While the traditional approach is to estimate the final stage of the learning process, however, due to the special features of the foreign language learning, it must fulfill a teaching function, as it is designed to adjust all the parameters of the learning phase and enhance the quality of education at its next step. Students should always be given the opportunity to comment in order to perform evaluation of the educational process (Tribble, 2012). This kind of feedback will serve as an effective basis for adjusting content of the material and the method of its delivery.

3. Conclusion

On the one hand, successful teaching of foreign language to engineering students and formation of the student's personality, on the other hand, depend on both external and internal factors. The internal factors include individual psychological characteristics of a student, while the external ones are psychological and pedagogical conditions of the educational process such as subject-subject relationship, individualized learning, trustworthy learning style, cooperation and creativity, strengthening the role of emotions and empathy (Matukhin, et al., 2014). Learner-centered approach in teaching of foreign language to engineering students is particularly characterized by the functional pedagogical activity of the educator to optimize teaching process which includes: a comprehensive analysis of educational activities in order to maximize the psychological comfort for the full development of an individual student, encouragement of students' self-esteem and self-worth development; creating a situation of success in learning of foreign language due to immediate implementing knowledge and enhancing self-control in the learning process. The survey showed that the most important psychological condition for successful mastering of

foreign language is intrinsic motivation, formation of which is ensured by the involvement of students in critical analysis, selection and design of personal and meaningful learning content.

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