

INTEGRATIVE MOTIVATION WHEN TRAINING THE NEW GENERATION OF ENGINEERS

**M.N. Makeyeva, L.P. Tsilenko,
A.A. Shipovskaya, K.V. Bryankin**

Tambov State Technical University, Tambov

Represented by Doctor of Culturology T.G. Bortnikova

Key words and phrases: English; motivation; new generation of engineers; synergy conception.

Abstract: The paper intends to show integrative motivation in acquisition of English to context of a new generation engineer training. The synergy concept has been found to be correlated with improving teaching practices. The integration of the Russian higher education into the unified educational space is considered.

Motivation is defined as the process that initiates, guides and maintains goal-oriented behavior. The issue of motivation for the successful acquisition of English is the most complicated task for students of technical university. In order to examine English learning motivation in the course of training a new generation of engineers, it is necessary to explore a number of factors which contribute to the way in which English teaching is conducted in modern society.

In recent years globalization has received a huge amount of attention as one of the most influential factors. These days mass media are replete with references to informatization, intellectualization, dematerialization, and globalization. The effects of globalization are multi-dimensional, having large social, economic, political and educational implications.

Education has always been an arena that reflected the current trends in the economy, politics or culture of any society. The academic model of the future is oriented at goals of sustainable development and will be an outstripping educational system. Firstly, it should outstrip all other spheres of social activities including science, because information processes will develop faster than material and energy ones. Secondly, certain outstripping mechanisms that

Макеева Марина Николаевна – доктор филологических наук, профессор, заведующая кафедрой «Иностранные языки», e-mail: modlang@mail.ru; Циленко Любовь Петровна – кандидат педагогических наук, доцент кафедры «Иностранные языки»; Шиповская Анна Анатольевна – кандидат филологических наук, старший преподаватель кафедры «Иностранные языки»; Брянкин Константин Вячеславович – кандидат технических наук, доцент кафедры «Химические технологии органических веществ», начальник учебно-методического управления, ТамбГТУ, г. Тамбов.

are directed at future and especially at goals of sustainable development should appear directly in the innovating educational process.

During the last few years the Bologna process has been going on in Russia, a process where ideas of mobility and transparency are put forward as a means to create a European educational space. As a result of dynamic social, economic and educational changes of the modern society the image of engineer has to be changed. We must have a continuing supply of bright, innovative engineers to deal with these challenges. It is necessary to have the next generation of engineers as a way to stimulate the economy of our country. One should realize that future science and engineering jobs must be filled by a qualified workforce here at home as strong economy depends on innovation and manufacturing. Moreover many long-term challenges are facing the world – from energy and health care to global warming and homeland security – and a modern engineer will play a major role in solving these problems. There are many challenges facing our world that require immediate engineering solutions. So we are challenged to prepare a new generation of skilled technical specialists.

What is the best way to approach it and remain motivated? Motivation is one of the foremost problems in educational model. It is not easy to reach a high level of proficiency in a foreign language. Language learning needs to be approached as they would approach any other long task. One should accept that language learning is difficult and time-consuming. It is important to realize that it is combined with other factors that influence a technical specialist's success. The most peculiar personal features of the modern engineering specialist are responsibility, mobility, professional competence, ability to solve professional tasks in standard and non standard situations, the skills of working in a team and others. All these features are connected with the pragmatic-communicative competence of a modern engineer. A new generation engineer should be able to actualize his ideas, concepts or meanings, both at receptive and creative levels, in audiovisual, graphic or some other format in English. In a context of this paper proficiency in English, as a global language, is an influencing factor in all professional activities of a competitive engineer. The importance of learning English cannot be overstated in an increasingly interconnected and globalized world. The necessity to learn English is evident. English is one of the most important and widely spoken languages in the world. English is a means of human communication in speech and writing; it is also a living and constantly changing entity. Over the past several decades, English has acquired a global presence. It is a preferred and increasingly accepted means of international and intercultural communication. It is the language of politics and diplomacy, the language of science and modern informational technologies and the language used in business contexts.

The necessity for input in the process of education as a main subject is a well-accepted fact, but the form and type that it needs to take for learning remains a controversial issue. We think that the most acceptable method of teaching should be based on principals of synergetic phenomenon. Synergy as an interdisciplinary research field has far going applications in the study of technical disciplines and English. Those who do support an integrative approach to language study are usually more highly motivated and overall more

successful in language learning. The synergetic focal point is that English is not taught as a subject separated from the technical subjects; instead, it is integrated into a subject matter area important to the learners. As a matter of fact, the synergetic aspect combines subject matter and English language teaching. Such combination is highly motivating because students are able to apply what they learn in their English classes to their main field of study. Being able to use the vocabulary and structures that they learn in a meaningful context reinforces what is taught and increases their motivation.

The students' abilities in their subject-matter fields, in turn, improve their ability to acquire English. Subject-matter knowledge gives them the context they need to understand the English. Future engineers are shown how the subject-matter content is expressed in English.

The synergetic approach enhances the relevance of what the students are learning and enables them to use English they know to learn even more English, since their interest in their field will motivate them to interact with speakers and texts. Students learn the language when they have opportunities to understand and work with the language in the context that they comprehend and find interesting. In this view, the synergetic approach is a powerful means for such opportunities. Students will acquire English as they work with materials which they find interesting and relevant and which they can use in their job or further studies. The more students pay attention to the meaning of the language they hear or read, the more they are successful; the more they have to focus on the linguistic input or isolated language structures, the less they are motivated to attend their classes. In synergetic concept, English should be presented not as a subject to be learned in isolation from real use, nor as a mechanical skill or habit to be developed. On the contrary, English should be presented in authentic contexts to make the students acquainted with the particular ways in which the language is used in functions that they will need to perform in their fields of specialty.

Students in the integrating classes are generally aware of the purposes for which they will need to use English. Having already oriented their education toward a specific field, they see their English training as complementing this orientation. Knowledge of the subject area enables the students to identify a real context for the vocabulary and structures. In such a way, future technical specialists can take advantage of what they already know about the subject matter to learn English.

Accepting that English is to be an international language can inspire young people to be science and technology leaders, by engaging them in exciting science-based research that build engineering and technology skills, inspire innovation, and foster well-rounded life capabilities including self-confidence, communication, and leadership; in a way that can make us see the world from a fresh perspective. At present no other language on Earth is better suited to play the role of the world language. In learning English, there can be many things that can be achieved than if not. It means that a new generation of engineers will be creative problem-solvers, a world of difference makers, and future helpers. They must be motivated to become the competitive specialists.

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Интегративная мотивация в процессе подготовки инженера нового поколения

**М.Н. Макеева, Л.П. Циленко,
А.А. Шиповская, К.В. Брянкин**

ФГБОУ ВПО «Тамбовский государственный технический университет», г. Тамбов

Ключевые слова и фразы: английский язык; инженер нового поколения; мотивация; синергетическая концепция.

Аннотация: Работа посвящена исследованию интегративной мотивации при изучении английского языка в процессе подготовки инженера нового поколения. Синергетическая концепция рассматривается как основополагающая. Обсуждается процесс вхождения российского высшего образования в унифицированное образовательное пространство.

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