Development of professional foreign language competence within transport industry requirements

Elena Kobeleva¹, Elena Stuchinskaya¹, and Evgeniya Dushinina¹

¹Siberian Transport University, Dusi Kovalchuk street, 191, 630049, Novosibirsk, Russia

Abstract. The labor market under current conditions is dynamic and non-homogeneous – it witnesses differentiation in terms of various phenomena and criteria, according to structural changes in the socio-economic environment of society. When considering the labor market requirements for foreign language proficiency, of crucial importance is to take into account the ultimate employers’ needs in the transport industry, the main one being maximum adaptability of graduates-specialists to practical activities in the relevant real sector of the economy. Industry-related educational institutions offer the integrated multi-level system of staff training, retraining and refresher courses conducted under the state regulation in order to meet the state needs. Therefore, to respond to the new challenges, which the transport industry is facing, the educational process continuity requires expansion of professional competencies in supplementary fields of knowledge, taking into account the international labor market condition. Among these, a high level of foreign language proficiency should be noted, which is a significant competitive advantage for a transport university graduate. The authors of the research formulated the industry-related requirements for the level of foreign language proficiency, determined the relevance of improving the quality of foreign language training of students at a transport university, and proposed the methodology guidelines for the use of mnemonics in the process of forming the professional foreign language competence of future economists.

1 Introduction

Currently, modern companies impose high requirements to personnel and the personnel development system. During the transition to the new technological mode, some professions and occupations become needless, others change and new ones appear, which also demands novel forms of personnel training. In this regard, vital issues arise on organization of training, selection of a personnel training program or curriculum, etc. Education and training within the framework of the educational standards in the two-tiered study structure imply a clearer focus on employers’ requirements [1]. This is especially urgent for the transport industry, which traditionally centers on the industry-related requirements for professional foreign language competence.
related state needs, and therefore, the employer's regulations on professional training at the industry-related universities based on their needs.

Reforming the transport industry in Russia (Transport Strategy of the Russian Federation up to 2030), its participation in international economic processes and establishing business contacts with foreign companies expand the range of activities for economists working in the international sphere, and, hence, special requirements are formulated for their professional training at transport universities.

Accordingly, the solution of the pedagogical problem associated with formation and development of the professional foreign language competence in future transport industry economists becomes relevant [2].

To complete the task in question means to increase the efficiency of foreign language training at the industry-related university, which is achieved by various methodologically and scientifically determined methods and technologies, including those aimed at effective memorization, retention and reproduction of professionally oriented information in a foreign language. This makes the purpose of this study relevant – to generalize the experience of using mnemonics in the process of developing the professional foreign language competence in students at a transport university.

2 Methods and materials

The authors also reviewed the practical experience of using mnemonics in the process of forming the professional foreign language competence in future economists of the transport industry. The experiment was conducted on the premises of the Siberian Transport University. 214 students and 3 teachers participated in the experiment at all its stages.

To improve language courses with the use of mnemonics, a questionnaire-based survey was conducted among the students of the International Business and Law Faculty at the Siberian Transport University. This survey solved several problems of a methodological and academic research nature. Firstly, to investigate the relevance of the use of mnemonics in the process of teaching foreign language disciplines; secondly, to monitor the efficiency of the use of certain mnemonics in the process of studying professionally oriented material by students of economics and customs studies; and, finally, to propose improvement of the methodology for using mnemonics by digital educational technologies.

3 Theoretical background
The analysis of scientific works allows us to make the following conclusions.

Firstly, it should be noted that employers’ requirements for professional competencies are constantly changing, and the authors understand “competency” as a rule, are created in various international associations, which contribute to the best practices of Russian and foreign railways.

Secondly, when studying a foreign language in close connection with the cultural and historical context, foreign language competence at the university level is divided into three groups according to the requirements of the established competencies: universal, general professional and professional competencies.

Thirdly, it is stipulated by the Federal State Educational Standard (FSES) that foreign language competence is extended to perform business communication in Russian and foreign languages, while language proficiency of future customs officers is acknowledged the importance of “competence” as a system of professional duties in real professional activities.

Fourthly, the requirements for foreign language programs are divided into three groups according to the relevance of the problem of forming professional foreign language competencies at academies, corporate universities, training centers, while language proficiency of future customs officers is linked with foreign language communication in the professional sphere.

Fifthly, the importances of “competence” as a system of professional duties in real professional activities, the ability to work not only with national, but also with international legal documents, which, by studying a foreign language in close connection with the cultural and historical context, promotes development of professional and corporate competencies, which include, among others, professional foreign language competencies.

Sixthly, the Federal State Educational Standard (FSES) provides services in the field of education at all levels [3]. In this regard, the Russian Railways Corporate University has established partnerships with various international associations, which contribute to the availability of various programmes.

Seventhly, the requirements of the FSES (companies) provide services in the field of work and learning, professional and economic activities and retraining in all areas.

Eighthly, the importance of “competence” as a system of professional duties in real professional activities, the ability to work not only with national, but also with international legal documents, which, by studying a foreign language in close connection with the cultural and historical context, promotes development of professional and corporate competencies, which include, among others, professional foreign language competencies.

Ninthly, the analysis of scientific works allows us to distinguish the most characteristic features of corporate education at the academic level, especially the corporate nature of the educational infrastructure, as well as improvement of the industry’s interest in the competence of its managers, employees, and liaison representatives of the Russian transport education.

Tenthly, the relevance of the problem of forming professional foreign language competencies at academies, corporate universities, training centers, while language proficiency of future customs officers is linked with foreign language communication in the professional sphere.

Eleventhly, the importance of “competence” as a system of professional duties in real professional activities, the ability to work not only with national, but also with international legal documents, which, by studying a foreign language in close connection with the cultural and historical context, promotes development of professional and corporate competencies, which include, among others, professional foreign language competencies.

Twelfthly, the importance of “competence” as a system of professional duties in real professional activities, the ability to work not only with national, but also with international legal documents, which, by studying a foreign language in close connection with the cultural and historical context, promotes development of professional and corporate competencies, which include, among others, professional foreign language competencies.
It is necessary to clarify the concept of “professional foreign language competence of transport industry economists”. This term encompasses not only the ability to use a foreign language in professional activities (technologies of international management and marketing, economic theory, but also related specifics), functional and reflexive components [8]. Reflexivity includes students’ interest in foreign economic information [9]. Motivational component makes responsible decisions in the process of foreign language teaching [7]. The latter is known as the “...image for the necessary unit of information, linking it with already known images” [12]. Studies that reveal various aspects of training specialists in the transport industry [6]. Mnemonics is known as a set of techniques and systems that serve to improve the process of memorising, storing, recalling and reproducing of modalities lead to the conclusion that a greater number of mnemonic techniques employed in the process of foreign language teaching and perception becomes much easier to process of memorising, storing, recalling and reproducing of certain connections with the material.

4 Results and discussion

The motivational component makes it necessary for learners to control the process of forming a professional foreign language competence of future transport industry economists with an emphasis on its acquisition and arrangement of certain connections with the material...
Encoding of the information to be grasped into visual images is a necessary element of memorization and memory retention. In this connection, when studying topics of a professional nature, it is recommended to compile mind maps. Despite the availability of various special software programs for drawing mind maps, for example, MindMapper, MindJet MindManager, etc., collectively compiling mind maps is more preferable and productive as it is accompanied by team work in jointly discussing the material studied and/or to be studied, building up the logic of reasoning, highlighting and emphasizing the core information, etc.

Application of mind mapping when students prepare for oral topic presentations can be illustrated using the example of the Russian and English language pair. Obviously, it is advisable to divide mind maps compilation into certain stages and accompany them by memory-developing exercises, which can be conventionally split into three groups in relation to the goals and objectives set: to visualise information, to create associations and/or to organise and arrange information.

To address the aforementioned issue, we give a practical example that encompasses techniques from all the three groups collectively. The teacher briefly shares some basic information as an introduction into the topic "Mergers and Acquisitions", for example: “A company that makes profits must pay taxes and dividends as well as plan directions to reinvest its retained profit. The latter can be allocated to innovating initiatives, research and development (R&D), production capacity extension and/or mergers and acquisitions (M&As).” The information obtained is to be transformed into the flow chart that depicts the process involving the appropriate terminology in the English language (Fig. 1). In this way, students are invited to make a description of the process using the chart to answer the question: “What is the main purpose of M&As?”

When studying the topic “Money and Banking”, for instance, students proposed the following mind map for its presentation (Fig. 2).
Pragmatically, mind mapping is the most effective technique for memorising and mastering specialised material in the process of forming the professional foreign language competence, since it productively combines visualising, establishing associative series as well as sequencing complex and large information arrays. In addition, it is this technique of mnemonics that allows logical incorporation of many mnemonic methods at all its stages: classification, grouping, number associations, phonetic associations, vocabulary chains, selection and distribution of the so-called strongholds in the general mnemonic plan or their combination into a general mnemonic plan, etc. For instance, in relation to the bottom row of the thematically determined terms in Fig. 1 (M&As, innovating, capacity extension and R&D), students are assumed to find out and explain the meaning of each term separately, and then the contextual relationship between them in the form of a mini-narration according to the subtopic plan within the overall designated theme.

An example of a vocabulary chain that can simultaneously be included as an exercise in drawing a mind map, when prospective customs officers learn to process export documentation in English, is as follows. Students ought to memorise a significant number of new foreign terms, e.g., 14 types of bill of lading. Average untrained students frequently fail to store in memory more than 7 separate foreign language terms at once. Consequently, the task of the teacher is to provide students with appropriate tools for reducing the number of units for memorisation. The mnemotechnic steps are to identify the terms, determine the synonymous pairs, develop the grouping criteria, group the terms according to the developed criteria, transform the developed criteria into keywords (triggers), memorise the keywords, construct a sentence from the developed keywords and remember it (if remembering a strictly specified sequence of units is required). This technique can be applied in memorising separate foreign terms as well as a sequence of customs formalities, stages of processing the shipping documents, etc.

The long-standing practice of teaching English for Special Purposes at the Siberian Transport University (the English Language Department) proves the efficiency of mind maps application by both students and teachers. As an illustration, teaching methods to translate foreign trade contracts in writing can be given, as a result of which the following tasks are addressed: to give exposure of the stages of concluding a foreign trade contract, its main characteristics and the compositional structure of the contract text; to introduce the general content as well as conceptual and terminological definitions of a standard foreign trade contract; to teach how to use high-quality translation tools.
quality parallel corpuses of contract sample texts as well as evaluate the existing corpuses (identify shortcomings, if any, and correct them); to assess the communicative situation and extra-linguistic factors in the process of pre-translation text analysis; to observe the compositional structure of the contract clauses text; to translate precise information (literal and numerical) and relevant terminology; to duly convey the category of obligation in foreign trade contracts in terms of stylistics as well as to use adequate lexical and grammatical clichés; to apply appropriate techniques when translating culture-specific or non-equivalent vocabulary (proper names, titles, new terms, discrepancies in the conceptual meaning between units of the source language (SL) and the target language (TL)): variative matching, transliteration/transcription, calquing or loan translation and descriptive translation; to use transpositions in the translation depending on the actual division of the sentence or thematic-rhematic articulation; to transform noun chains in Russian into subordinate clauses in English; to apply substitutions (generalisation, substantiation, antonymic translation and compensation), additions and omissions; to translate the English article; and to correctly use the English punctuation rules when translating foreign trade contracts.

Fig. 3  Translation roadmap to convey the essence of foreign trade contracts

The tasks above led to the development of a mind map for trainers (Fig. 3), which turned into the methodology guidelines for teaching written translation of foreign trade contracts to students of economics.

The guidelines, first of all, stipulate the necessity to clearly distinguish between and simultaneously integrate the general and particular approaches to the translation procedure regardless of the type of text. Further, in order to accurately and comprehensively convey the essence of each clause in a foreign trade contract in TL, compliance is assumed with the successive stages to follow, namely, preparatory, principal or main and finalising.

The stage of preparation specifies awareness of the basics of contracting and pre-translation analysis of the text in question. The principal stage or translation proper implies application of the appropriate translation tools to achieve adequacy. The finalising stage entails proofreading and editing which, oftentimes being overlooked by non-philologists, are of crucial nature to observe the E3S Web of Conferences 402, 08031 (2023) TransSiberia 2023

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pragmatics of both the sender and the receiver of the information, especially in the context of legally binding foreign trade contracts. Therefore, development of the professional foreign language competence in students of an industry-related university is facilitated by both various mnemonic practices offered by or to students and all kinds of mnemonics used by teachers themselves in the process of foreign language training. The questionnaire-based survey (Fig. 4) indicates that 86% of students positively evaluate the use of mnemonics in learning a foreign language, noting (78% of the respondents) their maximum efficiency in studying such large in volume and rather difficult to comprehend themes as “Mergers and acquisitions”, “Accounting”, “Financial markets”, “Securities”, “Terms of payment in a foreign trade contract”, etc. Based on the outcomes and reproduce information, can be interpreted as important factors for future specialists’ personal development and professional growth.

5 Conclusion

The article presents the results of mnemonics application in the process of forming the professional foreign language competence in students of economics, taking into account the industry-related training at the transport university, as well as the main provisions of the competence-based approach. The practical significance of the research is elaboration of training and methodology guidelines for the use of mnemonics in teaching English for special purposes, both by/for students and teachers. Development and implementation of the research results contributed to enhanced quality of foreign language teaching, as well as
References


