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Professionally oriented concepts in the foreign language oral speech of a future specialist in the conditions of multilingual professional communication

Conceptos profesionalmente orientados en el lenguaje oral de un futuro especialista en las condiciones de comunicación profesional multilingüe

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Contents

ABSTRACT:

This article reveals the importance of a correct professionally oriented conceptual sphere in professional communication of non-linguistic specialists. Models of professional communication formation of specialists were analyzed. Holding experimental work significant problems were defined in the construction of professional conceptual sphere and verbal speech and in switching between languages. The scheme of professionally oriented concepts formation of professional verbal speech of non-linguistic specialties under a multilingual space was developed. Our research work concludes that the scheme construction of professional verbal speech filled with professionally oriented concepts promotes the development of professional English training in non-linguistic specialties.
Keywords: multilingual environment, professionally oriented concepts, professional conceptual sphere,

RESUMEN:

Este artículo revela la importancia de una esfera correcta conceptual orientada profesionalmente en la comunicación profesional de especialistas, no relacionados con lingüìstica. Se analizaron modelos de formación de comunicación profesional de especialistas. En el trabajo experimental se determinaron problemas significantes en la construcción de la esfera conceptual profesional y de manera de hablar verbal y en el cambio entre idiomas. Se desarrolló el esquema de conceptos, orientados profesionalmente a la formación de manera de hablar verbal profesional de especialidades, no relacionadas con lingüìstica en un espacio multilingüe. Nuestro trabajo de investigación concluye que esquema de la construcción de manera de hablar verbal profesional está lleno de conceptos orientados profesionalmente promueve el desarrollo del entrenamiento de inglés profesional de

cognitive strategies, professional communication

especialidades, no relacionadas con lingüìstica.
Palabras clave: medio ambiente multilingüe, conceptos orientados profesionalmente, esfera conceptual profesional, estrategias cognitivas, comunicación profesional

1. Introduction

The importance of organizing effective teaching of a foreign language in higher professional education is beyond doubt. It applies not only to universities and faculties where there is training of future specialists in the field of foreign language teaching, but also non-linguistic universities where a foreign language is basically a general discipline (Maslova & Maslov, 2012; Lopatina et al., 2015; Golubkova, Masalimova & Bírová, 2017; Khuziahmetov & Valeev, 2018).

However, as it is known for today in our country a well-trained specialist must perfectly master Kazakh, Russian, and also English language, since our society is a multilingual environment. A huge amount of information is updated almost every day and in the majority this information flow is transmitted in foreign languages, especially in English. Today more than 70% of the information we receive in the Internet resources and some of the books are available only in English. In addition, it is required to add that English is a language of universal economics and politics and it concerns with other fields as well. Based on state requirements about the organization of transportation, traffic and the operation of transport that was chosen for our experimental work every specialist is to know the English language in advanced level. Especially, a specialist of transport logistics in international and freight traffic must have a professional oral speech filled with professional terminology. As according to the state requirements for today in the field of transportation attention is paid more to the development of logistics. And a competent speaker with a great amount of professional vocabulary is one of the most required skills of the specialist. This gives a future specialist an incredible opportunity to keep pace with other developing multilingual countries and improve in different areas of every field. But, as we know most students of extra-linguistic faculties are not enough competent in using the English language. Thus, specialists find it difficult to talk, make frequent mistakes and have a certain psychological barrier during the usage of the English language (Khorvash & Afghari, 2016).

In addition, it can be explained that future specialists are not adequately adapted to this pace of development and the exchange of information. But introducing various methods of training gradually it is possible to eliminate these shortcomings and give the right direction to our future specialists. After all, from the cognitive point of view of multilingual environment a specialist who speaks several languages is sufficiently developed than a worker who speaks only one language. However, there were many disputes and it was believed that the study of several languages hinders and slows down the process of human development. Especially, this is due to the perception of information in different languages. But over time it was confirmed that when a person learns a third language, after mastering two languages, he can see other important aspects of each language as a whole so that he is better able to learn and transfer mastered knowledge. Along with this, the knowledge of several languages makes it possible to learn information in the provided language in its original form. But in order to vary between several languages, it means deftly switch from one language to another, it is needed a special approach and design that will help to immerse oneself in a multilingual environment, to work efficiently and to develop (Bialystok, Craik & Viswanathan, 2004; Kazakov, Zakirova & Bírová, 2017; Drovosekov & Sakhieva, 2018; Rozhina & Baklashova, 2018; Wang et al., 2018; Lebedeva et al., 2018).

In order to understand the importance of a multilingual environment more clearly it is necessary to examine some of the models of multilingualism. These multilingual models provide an opportunity to learn the main aspects that make up this environment and the role and structure of the main constituent of multilingualism. And the main constituent of multilingual environment is speech. In our work the models of the linguists W.J.M. Levelt (1993), B. Hufeisen (2004) and D.W. Green (1998) were taken. Linguist W.J. Levelt (1993) focuses his attention on speaking in non-native language W.J.M. Levelt (1993) divided

conversation into three stages: conceptualization, formulation, expression. In other words, from the stage of conceptualization the student forms knowledge with the help of external information (words, phrases, structures on a certain topic), while they deal with meaning of words and their structures (Birova, Barancova & Simkova, 2016).

If we rely on the statements of the linguist Green D.W. (2015) a future specialist who has mastered several languages has active languages that he uses all the time at the unconscious level and also there are other "inactive" languages that simply remain in memory unused. In our position now English is used less than Kazakh or Russian languages in non-linguistic specialties, so it can be attributed to an inactive language. Therefore, it is necessary to increase the level of knowledge of a foreign language in order to use all languages at the same level. Also D.W. Green (1998) noted about so-called switching from one language to another during oral speech. According to linguist it is quite difficult to switch from one language to another language, because in many cases a person starts to get confused. Given all of the above facts it can be said that many young professionals find it sophisticated, especially difficulties arise during the assimilation of terms (professional concepts) and their meaning during oral communication in English (Newby, 2015).

Relying on information that given above the most important role in the formation of multilingual environment is played by a special instrument and one of the main instruments is verbal communication. Since, through verbal communication a specialist perceives and owns all existing information. As we know verbal communication can be written and spoken. But in our work we draw our attention to spoken language, namely professionally-oriented oral speech of future specialists, where professional concepts are widely used. This work provides an opportunity to understand the importance of one of the components of a professional communication of a specialist. One of the constituents is a professionally oriented conceptual sphere (De Zarobe & De Zarobe, 2015). In order to find out about the conceptual sphere more information we have done the following work: a brief analysis of the term "multilingual environment" in foreign language studies; identification of the main factors affecting the multilingual space; description of important aspects of the cognitive factor in foreign language studies; psychology of the term "concept" and its role in learning a foreign language; production of professionally-oriented communication; the role of professional concepts in speaking in a foreign language; identification of problems during the use of professional concepts in communicative acts; conducting surveys and short interviews, oral speech testing with students to determine their English speaking skills and their knowledge of professional concepts in English. Information given above let us consider that for constructing effective way of learning and teaching the professional English language, it is necessary to know the origin of concepts and their use in speech and the relationship with spoken language, and the correct introduction of cognitive strategy in teaching.

1.1. Psychology of the Origination of Concepts and Their Main Features

Before we explicate the origin of the conceptual sphere, it is important to find out what concepts are and their role in professional communication, so it can determine the main aspects that affect the development of professional speech. First of all, in a foreign language the development of professional competence (Porshneva & Abdulmianova, 2015) is properly required in the course of foreign language communication. Professional competence is a major professionally oriented communication skill of specialist in non-linguistic specialty that should be mastered by a future specialist. Communicative skills in professional work are complex and they include a lot of components: assessment of verbal communication; the fulfillment of the goal during the conversation; ability to predict; selection of thoughts and utterances; correct construction of oral speech. And for the development of the components given above there are a number of directions, and one of them is the structuring of the conceptual sphere of a future specialist (Passov & Kuzovlyova, 2010; Li, Pyrkova & Ryabova, 2017; Kvon et al., 2018; Dorozhkin et al., 2018).

Under the conceptual sphere we mean a structure that is built on concepts in relation to a

certain field of activity. We get such a scheme: the term - concept – conceptual sphere. In other words terms related to one sphere build concepts, then they are combined to construct the conceptual sphere. The conceptual sphere is divided into such types as linguistic, professional and thematic. In our cases we used a professional conceptual sphere (Klementsova, 2016).

As it is mentioned above one of the components of the conceptual sphere are the concepts. The term "concept" is not an innovation. It refers to the era of medieval conceptualism, whose founders are T. Hobbes (1998 [1642]), P. Abelard (2004 [1982]), W. Ockham (1997) and others. According to conceptualism words and concepts (concepts) are the bearer of certain information. They are an imprint, a mold of the reality surrounding us. They draw us a picture of the world (Serebrennikov, 1983).

Conceptualism considered concepts as universals that generalize the signs of things and are created by the mind for its internal use, focusing on important and relevant information. P. Abelard (2004 [1982]) considered that the concept is a set of terms that link to the statements in a single point of view on this or that subject to the determining force of reason (Leontyev, 1997).

The relevance of using the term "concept" is associated with the development of cognitive direction in psychology, in linguistics and the realization of special disciplines: cognitive psychology, cognitive linguistics, and psycholinguistics (Kryukova, 2008).

According to D.S. Lihachyev (1993) some of the postulates that take place in the formulation of the concept from other scientists. Concept is mathematical expression, in other words the operational unit of written and spoken language: the meaning of the concept in all its complexity is wider than the specialists' ability to embrace his consciousness. In general, this is the result of a collision of the dictionary meaning with personal experience (Lihachyev, 1993).

There are different definitions of concepts. For example: it is a unit of thinking that has a separate integral content and does not really decompose into smaller thoughts: it is also a cognitive mental structure, the features of which provide the opportunity to reflect reality in the unity of different quality aspects (Babushkin, 1996).

According to L.S. Vygotsky (1999) the concepts have a very important role in learning and perceiving knowledge. In his experiments there was analyzed mainly the cognitive processes of children. However, it can be said that these same processes are used during the study of any information for adults. It means that when studying any language, similar cognitive processes function in the human mind, because this is the same process of learning and reproducing knowledge. L.S. Vygotsky (1999)developed a theory of the development of concepts which describes the process of assimilation of concepts, and explained how to master certain concepts. According to L.S. Vygotsky (1999) there are two kinds of concepts: spontaneous and scientific. If spontaneous concepts are studied during everyday activities and they reveal routine actions every day. To assimilate scientific concepts, therefore, it is needed to have certain knowledge of spontaneous concepts. It means that scientific concepts should be learnt to such an extent that concepts may become spontaneous and specialists could use them in workplace without any efforts. The concepts depend on each other and require consistency. Also, according to L.S. Vygotsky (1999), spontaneous and scientific concepts can develop only with verbalization. In other words, a professional learns concepts when they communicate and exchange information with their colleagues.

Further, separately presented concepts are combined into a conceptual map. When specialists learn concepts, the most integral aspects are thinking (cognitive), memory, human imagination. When speech is produced, language finds its embodiment precisely in speech. And thinking interacts with memory for its part. It activates attention and imagination. All the structures of organization, processing and storage of knowledge are connected to the realization of the utterance. The mechanisms are important in this case allowing to connect the knowledge of the learner and language as a means of expression (Shaker, 2014)

According to B. Hufeisen and G. Neuner (2004), in the context of multilingualism there are

four factors that contribute to the development of communication with the help of the specialist's basic knowledge and assimilation of professional concepts for the future specialist. There are neuropsychological, student external factors, affective factors, cognitive factors (Language awareness, learning awareness, learner type awareness, learning strategies, individual learning experiences), linguistic factors. And according to the linguist, some of these factors can dominate others (Hufeisen & Neuner, 2004).

In our research, we rely on the cognitive factor, and how it influences perception of the knowledge (the assimilation of terms-concepts) and its reproduction (oral communication). And the cognitive factor is considered to be as one of the dominant factors. The cognitive factor includes learning strategies with which the cognitive factor works in learning a foreign language. In order to describe and understand the cognitive factor in detail, it is important to get acquainted with such components as individual student experience, perception of knowledge and cognitive processes of specialists.

The first component of the cognitive factor is cognitive strategies. According to R.L. Oxford & M.E. Ehrman (1988), there are six types of strategies that are used by students during the study of a foreign language: memory strategies, cognitive strategies, metacognitive, affective, compensatory and social strategies. All types of strategies have their advantages and disadvantages, despite the fact in the majority of cases more successful specialists choose metacognitive and cognitive strategies which prove their effectiveness in practice.

Among the scientists' strategies for mastering the second language (metacognitive, cognitive, socially-affective), the most priority for young professionals is metacognitive, since they place a great emphasis on self-management of the learning process: self-planning, self-training, self-control, self-evaluation. Metacognitive strategies serve to form cognitive process that associated with the selection and presentation of educational material in accordance with the goals and objectives of training, and social-affective strategies involving interaction with other communicators in this process. These strategies are used in the formation of all types of speech activity (Meshkov, 1985).

In order to be fluent in a foreign language, future specialists should have a significant knowledge base, which is the next component of the cognitive factor. It means that if specialists have this knowledge, the trainee can rely on his own individual experience (individual learning experiences), thereby facilitating the learning of a foreign language. To the most important knowledge we include grammatical and lexical knowledge, which contribute to the improvement of speech of the student. Knowing perceived information is one thing, however, a student should also be able to use correctly the language during the reproduction of knowledge. In other words, specialists must be able to vary information during speech activity (Mohammadipour, 2015).

But first of all, in order to have good knowledge, it is important to perceive information correctly that is given in the form of a step-by-step process. According to A.N. Shamov (1999) the level of perception reflects the sequence of processing of speech signals and the level of nature of the construction of speech messages. The construction of speech messages also occurs in the form of levels. During the construction perception of individual words passes by a different principle. As a result of multiple distinctions in consciousness the image of the form and the image of the meaning of the word are formed. During the perception of new elements, learner relies on the form and meaning of the word. This is the lexical background of specialists that should be controlled in oral communication (Shamov, 1999).

In the perception of speech great importance is attached to the mechanism of equivalent substitutions. The effect of this mechanism is about the process of perception, when the recipient replaces words and phrases with more simple signals. Sometimes visual images are even used for these purposes. This is due to the fact that the sign arising in the consciousness reflects the primary sign not directly, but indirectly or inverted. The understanding of specialist occurs by translating from the "language of words" to "language of images" or "language of thought." The various words (terms) conjugate in meaning correspond to the image that has formed in our consciousness. The search for such words is based on our linguistic and general knowledge. In other words, relying on the knowledge

that was mentioned specialists construct their professional conceptual spheres (Shamov, 1999).

A.R. Luria (1979) points out that "the unequal frequency, with which different meanings of words occur, determines the difficulties that arise when people understand words with different professional experience." In such situations, a specialist can identify concepts and determine their meaning in accordance with the meaning of terms familiar to him. An erroneous definition of the meaning of concepts can occur in the perception of a complex text, in which there are special terms and many unfamiliar concepts.

When specialists understand a multi-valued word, several of its meanings compete with each other. This happens until the word gets its specific contextual meaning. Context indicates one of the meanings of concepts and the meaning of the whole conceptual sphere. As we can see, the process of understanding the meaning of a concept is always a choice of meaning from many possible meanings. This choice is made by analyzing the relationship in which the concept enters with a common context. Such an analysis is conducted with the participation of the cognitive thought process (Meshkov, 1985).

To realize and develop students' knowledge the cognitive process of the learner also contributes. This process is one of the most important parts of cognitive strategies. The cognitive process which is used in all stages of student learning, also it helps to produce learnt knowledge of a future specialist. Speaking about that more precisely, the student's cognitive process leads to the formation of a lexical competence, and in our case also professional communicative competence, which includes speech, language, educational and cognitive competence (Mohammadipour, 2015).

The cognitive process of the student develops through the understanding, processing and consolidation of this information. To fix or memorize certain professional terms as a result of knowing something it is very important that a future specialist draws attention to the practical side of this process, it means that it is essential to implement fully this process and a specialist should use it in practice. In this case, cognitive processes are accompanied actively by the student's oral speech. In this case speech is the main tool for the realization and reproduction of spoken language. Speech and thoughts are formed with the help of terms (professional terms, concepts). Each term plays an important role in the speech of a specialist and one unclear term can bring a not very good consequence, in other words, the conversation loses its meaning and, as a result an incorrect construction of the professional concept-sphere takes place (Shamov, 1999).

V.P. Belyanin (2002) defines the perception of speech as "the process of extracting the meaning behind the external form of speech utterances". In our case, we perceive messages in written form of the language. We know that language represents a special representational system. It encodes something in a symbolic form that stands outside its own limits. Words and other linguistic units (concepts), or it can be said terms, activate those entities that signed substituents, excite in the specialists' memory the concepts associated with them, and further on the conceptual sphere (Krauss, 2002).

In the process of formulating a thought, there is a close interconnection of all aspects of the language (lexical, grammatical and phonetic). This relationship is important for the implementation of the intended plan. The process of selecting lexical units is also important. The functioning of the system is closely connected with the storage of lexical units (Lyontyev, 1999). The word is always in action. In the process of reproduction of speech, the structures of the internal vocabulary are actively included, as E.S. Cubryacova (1994) revealed in her research. She called the internal vocabulary "an obligatory component of speech activity", "the system of its provision" (Cubryacova, 1994).

There are other different cognitive strategies. However, here we tried to show those that are the most important and common for every specialist in the learning or the perception of a language. In other words, in the learning process a specialist should pay attention to his own experience and knowledge, the way of thinking and formulating his thoughts and he is to think about whether cognitive strategies are correctly used in teaching, whether the way of perception and use of professional concepts should be changed in the specialist's spoken language.

After the analysis of the terminology including terms as "multilingualism", "concept" and "conceptual sphere"; a revision of cognitive factors and strategies and their connection with communication skills of specialists; a research of theories about switching from language to another and realization of professionally oriented concept sphere, we have created our own model. It is more leveled scheme of learning professionally oriented concepts on the basis of cognitive and communicative activities of specialists in the conditions of multilingual environment. All the gathered information was taken for the groundwork of structuring our scheme (Figure 1).

Figure 1
Studying professional concepts using cognitive
and communicative processes in multilingualism
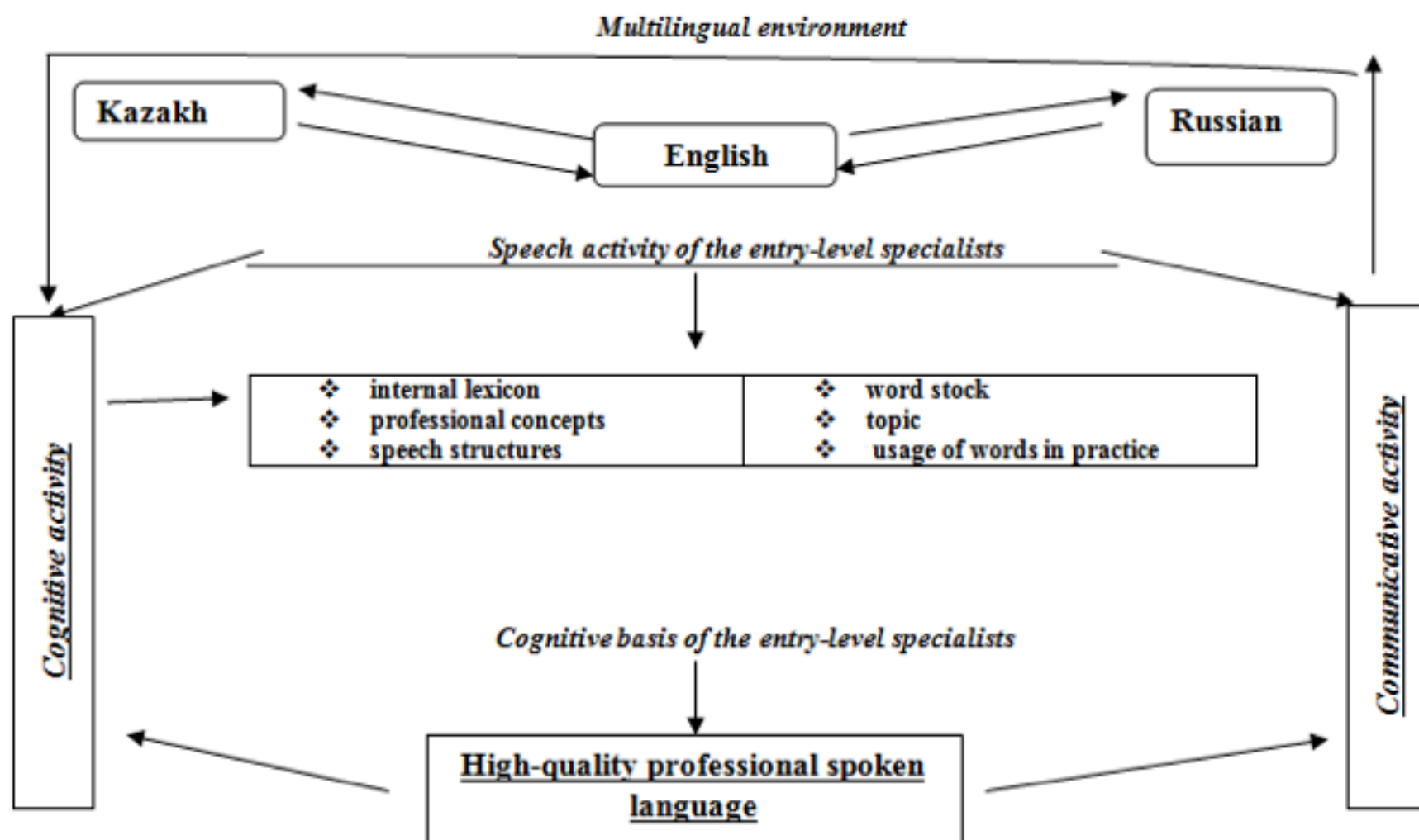
This model clearly shows the importance of multilingual environment (switching between languages), the ability and competence of specialists, in other words the relationship between cognitive and communicative skills. Also, a special relationship between them is shown by the way of learning and the construction of a professional competence of the future specialist. Ultimately, considering all the components illustrated in this model the future specialist builds a full-fledged professional verbal speech filled with professionally oriented concepts.

1.2. Realization of Professional Oral Speech of Future Specialists Filled With Professionally Oriented Concepts

The realization of professional communication is based on the usual structure of spoken language, and the only feature that distinguishes it from simple speech is that it is much more complex and multilayered, and includes more professional terminology that requires special attention in the study and its production. First of all, it is important to consider the main levels and stages of production of the speech based on the example of different models and the theory of several linguists.

According to Zimnya I.A. (1985), the process of realization an utterance passes three levels. It is a motivational, forming and realizing levels.

1. awake the motive and communicative intention.

2. the formation of meaning and its construction is responsible for the logical correctness of the utterance

3. realizing the level of articulation (pronunciation) and intonation (Zymnya, 1985).

When the statement is generated, the corresponding procedures can proceed in parallel. They are "superimposed" on each other in time. The work takes place at all levels of the language structure at the same time. The generation of speech proceeds consistently, interactively, recursively and automatically (Zymnya, 1985).

B.B. Velichkovsky (2016) also noted the importance of lexical knowledge during the formulation of speech. He argues that the generation of an utterance ends in processes that regulate the use of lexical units in oral or written speech. There are a number of things that affect the generation of an utterance: attention and imagination, memory and thinking, language and speech, all kinds of knowledge give the student a full body of information about the speech situation. Behind the disciple it will be correct to choose from the variety of specialists' knowledge those that are important and necessary for constructing a future statement (Cerny, 2016).

A.A. Leontyev (1999) believed that the generation of speech is carried out on the basis of the heuristic principle. The principle of heuristics allows the speaker to choose any model. It means that each specialist can use his model of utterance. Generating an utterance is a unique solution to cognitive tasks. The solution of cognitive tasks is "thinking aimed at solving a specific problem and including the formation of response reactions, as well as the choice of possible reactions" (Solso, 1996)

Professional oral speech is versatile including a variety of cognitive processes. T.N. Ushakova (2006) pointed out that speech includes three links - the perception of speech, its production and the central link ("inner speech") (Li, Hung & Chang, 2010). One of the most important stages in this process is the reproduction of inner speech. Inner speech is a kind of retraining and planning of communication. Only after the correct construction of internal speech a specialist can reproduce his speech in the right form. Inner speech is the central link in the reproduction and perception of foreign speech. Further, she supposed that the perception of speech and its production have "the submission to the central link".

For a long time, internal speech was understood as speech devoid of "motor performance" or in other words "conversation with oneself." In the psychological literature, there are three main types of internal speech: 1). Inner pronunciation is a "conversation with oneself", which preserves the structure of external speech, but lacks background. 2). Inner speech. ("Code images and diagrams," "subject code," "meaning of the object "). 3). Internal programming, in other words the formation and fixation in specific units of the plan (program) of the speech utterance, the whole text and its content parts. It is the other way of representation of the professionally oriented conceptual sphere construction which is the main part of reproduction of professional oral speech (Schmid & Lowie, 2016).

It can be also noted thoughts of the linguist W.J.M. Levelt (1999) about the formulation of professional oral speech. According to the linguist W.J.M. Levelt (1999), there are several stages and components of a spoken language. Verbal thought until the moment of conversation, lexical selection, the formulation of sentences and the correct use of them in different communicative situations. Linking these components to each stage, which were mentioned earlier, we get a certain chain: using verbal messages, a person goes through the stage of conceptualization, then it smoothly goes on to the formulation. At the stage of conceptualization, the specialist formulates his professional conceptual sphere and only then he moves on to the next stage. When moving from one stage to another, there are also submodules among each component, which help to link these stages. Thus, a specialist develops his own thoughts and constructs concepts in his spoken language. Following these two stages, a specialist moves smoothly to the third stage, it means he expresses his ideas aloud, that is the final stage in the formation of a multilingual environment (Schmid & Lowie, 2016).

Reviewing all the models and constructions of professional spoken language formation it can be concluded that reproduction of speech should be realized step by step and they are really

densely connected with professionally oriented concepts. Consequently, oral speech should be developed with the construction of conceptual sphere of the future specialist, so that professionals would have advanced professional oral speech.

1.3. Methods of Teaching Professional-Oriented Concepts for Non-Linguistic Specialties

As it was noted earlier, in non-linguistic universities a little attention is paid to professional-oriented teaching of a foreign language. Since young specialists receive most of the material in a certain professional field in Kazakh or Russian. Consequently, students have some problems during the assimilation and structuring of their professional communication in a foreign language. Especially, problems arise in the use of lexical knowledge of students during speaking. It means that they do not know that the word is as a tool of thinking, they do not know how to use the capabilities of their vocabulary. In order to resolve this issue it is necessary to develop the training of the lexical part of the language to build a competent, professional oral communication of the future specialist (Aronin & Singleton, 2012).

It should also be noted that according to future specialists' opinion, they do not have special difficulties in mastering lexical knowledge, but reproduction of acquired knowledge (professional concepts) is a complex process for young specialists. A little more details of the complexity of future specialists can be seen further in experimental part. Judging from this point of view, it can be said that future specialists do not understand enough the meaning of words and concepts are not remembered in the right way so that they can be used in professional communication without any difficulties. This inference lets us know that future specialists have poor knowledge of terminology and defined incorrectly the boundaries between professional concepts in the study of English. Consequently, experts have not properly built a professional conceptual framework, this is, what prevents them from free articulation during the professional communication (Kalugina, 2016).

And in our work the unit of organization of professional knowledge of future specialists of non-linguistic specialties is professional concepts. The professional conceptual sphere represents the knowledge of the future specialist that they need to study during their studies in higher education.

There are a number of foreign language courses for specialists of a non-linguistic specialty. I.M. Berman (1970) claims that his proposed course consists of three stages: work on texts of a general technical nature; reading and working with special text; improving the skills of independent work with specialized literature (Shtern, 1981).

Judging by the three stages of I.M. Berman (1970), the course helps develop communicative competence for mastering professionally-oriented communication. The first is a general English course, which includes general topics, and in the second stage, the specialists are trained on subjects only directed at a certain sphere of professional activity. In this stage a specialist actively uses his cognitive skills and therefore this stage is crucial and especially important in teaching a foreign language for specialists of non-linguistic specialties. In our work, we focus more on the second stage, and our proposed teaching methodology is based on the second stage. The developed tasks are based on the same way on special texts with information on a certain specialty, where terms are used to a large extent for constructing a professional conceptual sphere in the conditions of professional verbal communication (Volosuhina, 2007).

2. Methodological Framework

In our research part we conducted survey with students in the organization of transportation and exploitation of transport specialty. During the survey:

- a great quantity of theories and models of multilingualism was reviewed and the term "concept" and cognitive factors and strategies were identified;

- questionnaires were taken in order to know the knowledge of professional oriented concepts.

- discussion were conducted to identify difficulties in production of professional speech of the future specialists in the English language;

- testing were taken in order to reveal problems of the future specialists in switching from one language to another;

- interviews with employers of companies in the field of the organization of transportation, traffic and the operation of transport in order to know the requirements of organizations related to the English language.

Based on our survey 3 main questions were identified:

- Do future specialists experience any difficulties during the switching from one language to another one?

- Can future specialists formulate correctly professionally oriented concept sphere?

- Is it difficult to formulate full-fledged speech statements filled with professionally oriented concepts to specialists of non-linguistic specialties?

 With regard to these questions, the following research hypotheses were found:

- Future specialists experience difficulties during the switching from one language to another language.

- Future specialists can not formulate correctly professionally oriented concept sphere.

- It is sophisticated to formulate a full-fledged speech statements filled with professionally oriented concepts to specialists of non-linguistic specialties.

The experimental part of the study is the main and the longest in our scientific work, which lasted for two years from 2016 to 2018. The survey was conducted among second year and third year students of organization of transportation, traffic and the operation of transport of the Kazakh and Russian groups. In total, about 108 students were surveyed and participated in the experimental part of our research (53 participants in the experimental group and 55 participants in control group). Students were from the several universities with the chosen specialty of Astana, Kazakhstan. All the groups in the sample of the current study had been learning English as a second language for two years. Generally, there were more males (70%) than females (30%) as because in this specialty almost all the work dedicate to males.

All the questions that were given in the questionnaires in the form of multiple choice or in the form of affirmative sentences where students should confirm their answers with "Yes" or "No" options and there were a lot of questions where students write their point of view or suggestions. During the questionnaires students answer in written form and it was anonymous so that students could express their points without any hesitation. After the questionnaire there was a discussion it was conducted in free form where students could point out their problems on their professional oral speech and give their suggestions about the improvement of their learning of the English language on the basis of their preferences and personal difficulties. Questionnaire can be taken online, as we provided it in written form and with help of the website quizlet.com.

Along with our special questions we provided a placement test to measure students' overall speaking proficiency and their knowledge of professional terms. Like any other speaking placement tests there are questions that start from the beginner level and move on the high-leveled language. Speaking test was divided into several steps.

On the first stage participants answer general questions associated with topics as to get acquainted with somebody, to introduce oneself and other simple information, for example their occupation, interests and so on. In this step students were to interact with teachers. On the second stage participants interact with each other. In this part there were specific themes that students should discuss, share their opinion and in some cases they give their suggestions and alternatives.

As students did not have opportunity to take test in one time, so it can be done online by Internet connection. For that experiment we have used linguahouse.com, where students could participate in test that is more specific and contain more complex questions than out

questions and it has a certain structure. Here is the link where we took a placement test https://www.linguahouse.com/esl-lesson-plans/business-english/speaking-level-placement-test-business-english. This test was accompanied by experts, and every answer was recorded in the form of the video or recorder based on the agreement of each participant.. Students could record the video themselves and send it or communicate online with experts with the help of applications as Ovoo or Skype. For assessment the rubric was chosen and subdivided into several criteria as coherence and cohesion, vocabulary, grammar and fluency of specialists' speech. We paid more attention to vocabulary of students, in other words the presence of professionally oriented concepts in their speech. Pre-test was taken before the academic year and post-test in the end of the year..

3. Results and Discussions

During the research, several experiments were conducted, including the study of state requirements for the specialization of the organization of transport and traffic and the operation of transport; compiling and conducting questionnaires and interviews; compiling a complex exercise on the basis of questionnaires and collected information and their validation during the practice with students specializing in the organization of transportation and traffic and the operation of transport.

 The first stage of the study, as mentioned above, is literature review or the study of state requirements in the specialties that were noted earlier. During the study, the state education standard was considered. According to state requirements, nowadays the main functions of professional graduates of the specialty organization of transportation and traffic and operation of transport are:

- organization management and logistics;
- marketing and management of the industry;
- design;
- service and operation.

The most essential skill for future specialists is speaking. Specialists should be able to speak fluently and pay attention to their cohesion and coherence. Also, a specialist should have vocabulary that appropriate to the profile of the specialty and understand information of the professional nature. Their speech must be filled with terms for constructing a professionally oriented conceptual sphere.

The second stage of our experimental work consisted of questionnaires and interviews. Interviews were conducted mainly with all the participants of the experiment online, it means that after the survey additional questions were asked or during questionnaires were in the form of comments on questions and additional questions.

The purpose of questionnaires is to find out the structure of cognitive thinking of students, how well developed the students' communication skills and what difficulties they have during the conversation, how well they know the professional words according to specialty, in other words the general idea of students about the concept of "transportation". Also, their general attitude to the English language and the triune language, in other words, how well they are ready for a multilingual environment. The following questionnaires were conducted among second-year students specializing in the organization of transportation and traffic and the operation of the transport. Below we can see a list of questions used in the questionnaire for future specialists:

Here are the statements. If this statement is true to the student, then they write "Yes" option, if it is incorrect, then "No"

1. I have difficulties in learning words in my specialty in English

2. I find it difficult to understand the meaning of some professional words in English

3. I find it difficult to explain professional words in English.

4. Before discussing a particular topic, I first know what professional concepts to use when speaking in English.

5. During the conversation, I find it difficult to use professional words, although in fact I

know these words in English.

6. During the conversation, I need time to find suitable professional words in English for conversation.

7. I can not participate and add my opinion in a conversation in my specialty, because I do not have enough vocabulary in English.

8. I often confuse the meaning of words in English.

9. I find it difficult to use the learned theoretical information during practice in English.

10. I do not understand the meaning of professional terms in English.

11. I do not know the equivalents of words in English in other languages (Kazakh, Russian)

12. I have no difficulty remembering professional words in English.

13. I find it difficult to switch from one language to another.

There is another list questions that were used for our oral speech testing experiment. Here we can see that questions are given in the form of a multiple choice. It is specific testing questions as there it can be seen questions about reproduction of professional speech and the usage of professional vocabulary (concepts). See Table 1.

Table 1
A list of questions on the reproduction of professional speech and the usage
of professional vocabulary for the future specialists of non-linguistic specialty

1	What university do you study at?		
2	What is your native language?	Kazakh	Russian
3	What school did you finish?	rural	urban
4	How many years have you been studying in university?		
5	How many years have you studied English?		
6	Have you ever followed extra English courses ?	yes	no
7	If you have learnt where was it?	in the courses	With a tutor
8	Do you have a desire to master the English language?	yes	no
9	What perspectives do you see with the English language?		
		Yes	No
10	Do you have psychological barrier in speech?		
11	Is your discourse spontaneous?		
12	Do you have pauses in your speech?		
13	Can you switch from native language to the English language very quickly while speaking?		
14	Do you think that your speech is rich in professional terms?		

15	Is it difficult to you to operate with professional vocabulary?		
16	Do you construct your inner speech quickly (not aloud)?		
17	Can you construct the structure of your speech correctly?		
18	Can you focus on the topic of discourse well enough?		
19	Is it difficult for you to take part in a group discussion (to be a leader or moderator)?		
20	Do you have any difficulties in expressing your opinion?		
21	Do you have difficulties when you ask your questions?		
22	Do you feel uncomfortable during the speech with native speaker? (Englishman)		

According to the questionnaire it is known that students are from different cities of Kazakhstan. Half of the students have been studying English since fifth grade, and another half of the specialists have been studying since first grade at school, it is almost 6-11 years of learning. Only 35 % of participants have followed extra English courses and they showed better results than other specialists. And almost all students consider that they will not need English in their work place and have less motivation to learn it.

Along with that judging from the responses of questionnaire and interviews, as well as oral speech testing a great amount of students have a psychological barrier in their speech activity. They can hardly ever switch between different languages, namely from Kazakh and Russian to the English language. Also almost 85 % of future specialists have pauses in their speech because they need more time to think over their answers and point of view and to construct their inner speech and reproduce it out loud. A great quantity of specialists can not use correctly professional terms while they are speaking. The results of the oral speech show us 95 % of entry-level specialists are not able to construct correctly their speech. And consequently, they feel uncomfortable with native speakers during speech activity.

During the questionnaire among students it became known that they have some problems in remembering and reproduction of professionally oriented concepts. In spite of the fact that the students have studied and know enough concepts, they are not able to use them freely during a conversation. In some cases almost for all specialists it is really hard to remember concepts and to produce professional concepts in verbal speech, also half of the participants can not differentiate the meaning of concepts. Particularly, 75 % of participants find it hard to select the right way to remember correctly professional concepts.

Judging from the answers of interview students have difficulties in professional communication. Namely, before the conversation, 80 % of participants responded that they need preparation for speaking, that is, there is no spontaneity in the conversation. And during the conversation participants have some barrier and because of that they can not easily express their opinion, they would rather keep silence. Along with that, in the interview there was taken place a little wider than in questionnaire, some of them were more individual and spontaneous.

Testing part of the experiment was conducted orally in order to check how specialists can fluently change languages in conversation. Generally the great amount of specialists responses give us a clue that they need a little more time to change the language, as they think in their native language and translate their thoughts in English language using their inner speech. During oral speech test specialists were given different tasks where they should demonstrate their knowledge of three languages and there were taken such tasks

that based on real-life professional situations. For example, there was conversation between employee and employer; passenger and conductor. Along with that in written test specialists were asked to differentiate meaning of professional terms where we chose specifically concepts that have approximately the same meanings. Especially, there were words that were the same spelling but they can be understood differently. According to the results of the tests it can be said that a great amount of students can hardly ever switch between three languages. It was sophisticated for them to identify meanings of all given professional terms.

The survey lets us to understand that the level of language knowledge of non-linguistic specialty is not enough for the future specialists. As it was mentioned above the second year students do not know appropriate ways and techniques for remembering concepts correctly, and most of the students are not able to explicate the meaning of professional concepts, that could be one of the reason, why they can not produce concepts correctly in their professional communication. And according to the curricular of the future specialists of non-linguistic specialties they are given only half of the year for professional English.

Moreover, we also asked students for any suggestions for English language learning, but more than a half of the entry-level specialists answered that this was better if they had a professional vocabulary with terms on the specialty, where there are Russian, Kazakh and English equivalents of all professional concepts. Secondly, judging by the answers of students it was noticed that usually in English tasks there are a lot of theoretical tasks in which a large number of lexicons and phrases, but there are not enough practical tasks, in order to remember and use further all the phrases and professional concepts without difficulty in professionally-oriented verbal speech. Therefore, it is important to design a special and effective method so that the entry-level professionals could produce their professionally oriented concepts in their professional verbal speech.

On the basis of answers of the questionnaire it was confirmed students did not know enough professionally concepts for the correct construction of professional conceptual sphere. Judging from the education curricular future specialists learn a lot of terms. However, students are not confident in knowing the correct construction of concepts reproduction. Also students did not know the right construction of speech realization and they could not change one language to another quickly. All the mentioned facts let us point out that it is needed to improve methodology of teaching the English language in non-linguistic specialties, so future professionals are able to develop their speaking proficiency.

4. Conclusions

Carrying out this research, a number of experiments were carried out which made it possible to determine the importance of professionally oriented concepts in the construction of professional verbal speech in a multilingual environment. Specific terms as "multilingualism", "concept", "reproduction of speech" were defined. The sufficient components of multilingual environment were described. During the research it was revealed that, in order to get a well-constructed professionally-oriented verbal speech, it is necessary to master well the professionally oriented concepts in the required specialty and to know the main cognitive strategies in the teaching of foreign languages. Along with this, a definite model for constructing a specialist's conceptual sphere and a special scheme for realizing spoken language were given in our research work.

A number of questionnaires, interviews and oral speech testing were conducted, namely they were taken from students specializing in the organization of transportation and traffic, and the operation of transport. During the surveys our major three hypotheses were proved. It has been revealed that English is an inactive language, since many students think that they are learning a foreign language not for their future work. And judging from the results of oral speech test and interview it was proved that future specialists are not fluent in speaking English language. It was confirmed that future specialists do not have enough knowledge of professional concepts, in particular, students can not reproduce the concepts in their speech. Consequently, the specialists are not a full-fledged and filled with professionally-oriented concepts. And finally, it was verified that the level-entry professionals

do not have enough skills and experience to change fluently from one language to another during the professional communication.

In conclusion, the analysis of our survey lets us identify that all the revealed issues, every major aspect of the spoken language construction can lead to the development of the collection of exercises for the improvement of professional communication of entry-level specialists that gives the opportunity to make a competent future specialist who sets his mind on a foreign language without difficulty and easily understands the meanings of all the professionally oriented concepts used in the specialist's professional verbal speech.

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[Index]

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