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Ecological Problems of the Region as the Base for Foundation of an English-Speaking Communicative Competence

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Abstract

The problem is relevant because of the need to develop the English-speaking communicative competence of the Kazakhstani people as a component of the compulsory trilingualism in Kazakhstan. Currently, in the context of an active unaided entry of Kazakhstan into the global community, there is an acute challenge of increasing the number of people who speak English. In order to master the English language for practical purposes, it is important to identify common global problems for the whole society. This can be the ecological state of Kazakhstan. This topic will be one of the key bases for the development of the English language competences of Kazakhstani people, when two important aspects are integrated: expanding the functioning of the English language in the country and the need to understand the growing environmental threat to life on the Earth. People in all regions should be actively involved in the environmental movement, as environmental problems arise because of indifference to violations of environmental standards at different levels (from household to production), due to their direct non-compliance at the local level and inactivity of society in solving environmental problems. The purpose of the article is to show the real possibilities of integrating the development process of students' foreign language and the process of identifying ways to solve environmental problems of the region as immediate tasks that they solve as volunteers. The method for the study of this problem is cognitive-communicative, which allows, first of all, determining the cognitive structure of a text with an ecological theme and on this basis to subjectify obtained information in the minds of students through their environmental speech intentions. The article reveals effective ways of selecting educational material for the formation of English communicative competence based on environmental material. The mechanisms for selecting educational material and the planning methodology for the thematic lesson cycle can be useful for planning the cognitive-communicative learning process based on environmental regional problems for any educational audience and are intended for foreign language specialists and environmental teachers.

Keywords: environmental speech intention; subjectivity of environmental information; English language; communicative competence.

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Introduction

Currently, there is a new stage of the language policy in the country. This stage is associated with the unaided entry of Kazakhstan into the global community. Since 2007, the cultural project “Trinity of Languages” has been implemented in stages, which is described in the Message to the People of Kazakhstan “New Kazakhstan in the New World” (Nazarbayev, 2015). In this project and in a number of subsequent state programs (Nazarbayev, 2012; 2014), the people of Kazakhstan were given a new task, along with the further development of the Kazakh and Russian languages, mastering English as one of the common world languages. English is evaluated by the President of Kazakhstan as the language of successful integration into the global economy (Nazarbayev, 2014). However, in Kazakhstan there is no natural English-speaking environment, so people study it in classrooms, laboratory (artificial) conditions. And for successful functioning of the English language, it is necessary to create the need for its natural use. Russian linguist Sharandin (2017) states:

“Language should be in demand as some kind of additional means for communication English language cannot be considered habitual from the point of view of its usage in a free, relaxed manner in everyday life for the majority of people in the post-Soviet space. Rather, its usage is limited either to the sphere of scientific application, or very narrowly to the sphere of business. ... It should be a natural awareness. It is necessary to make everyone understand: yes, you can live without this language, but in certain situations you will feel uncomfortable. ... it is also important that this need will be accompanied by psychological comfort ...”.

One of the main approaches to the natural acquisition of the English language is the organization of the process of secondary socialization. Such socialization of the Kazakhstani people in an English-speaking communicative environment is possible not in terms of learning the language itself but when discussing a global problem that is very close and familiar to people, and there is a need to exchange ideas in the language being studied. One of these global problems is the environmental problem of the region which can be discussed in an online mode with English-speakers. The implementation of this idea is based on the methodological ideas of psycholinguistics, sociolinguistics, linguodidactics, which are interconnected.

Purpose and objectives of the study

The purpose of the article is to show the real possibilities of integrating the development process of students' foreign language and the process of identifying ways to solve environmental problems of the region as immediate tasks that they solve as volunteers.

Literature review

First of all, we rely on the understanding of the concept of speech activity as a hierarchically located set of language as an object, language as ability, and language as a process (Leontiev, 1999). Also,

regarding these three aspects of the language, the concepts of “linguistic personality”, “speech personality”, and “communicative personality” are correspondingly differentiated (Krasnykh, 2012). If we reveal the essence of these concepts, we will see penetration of one concept into the content of a concept of a higher order. A linguistic personality is a personality who can correctly operate with linguistic means in speech. Speech personality is the language personality plus personality who can express logically and consistently their thoughts on a specific topic that they have certain knowledge of. Communicative personality is the language personality plus speech personality plus personality who can take into account informal, formal or semi-official communication environment, type of relationship with the interlocutor, age and social status of the interlocutor, can make contact, maintain and complete it. Here, we will have in mind not a linguistic personality in general but a secondary linguistic personality, a secondary speech personality, a secondary communicative personality. In this aspect, the goal of our article is to show that not linguistic but extra-linguistic topics of communication (in our case, the environmental problems of the region) should become the basic material for the formation of a secondary speech and communication personality.

The next key theoretical position, revealing our methodical way of solving the issue, is the idea of cognitive structure of a potential text (Fillmore, 1982; Minsky, 1988; Van Dijk, 1989). The theme is an extralinguistic factor that correlates with reality. Therefore, first of all, it is an objectively existing product of knowledge, accumulated human experience. To any topic, we can lead a certain number of micro-topics and make a plan for its disclosure. This is the representative basis of the monologic utterance. Krasnykh (2012, p. 291) writes: “Generating a text, the starting point is the concept that predetermines a semantic structure of the text and through it the logical structure”. In our case, the process of representing the ecological topic becomes dominant, and learning English on this basis is approaching to the natural process of learning the native language.

The following methodological basis of the idea that we proposed is the theory about the speaker's intention. In integrating an environmental topic, it is important to turn objective content to a subjective speaker. In this regard, we rely on the theory of the British linguist Austin (1962), who identifies an illocutionary act as a pragmatic component of the meaning of an utterance, reflecting the speaker's communicative purpose. This idea is confirmed by the psycholinguist Krasnykh (2012, p. 291): “... the concept, reflecting the author's intentions and being mediated (through intentions) by the embodiment of the text generation motive, sets the communicative purposefulness of the latter. Further, the scientist notes the following: “The embodiment of the intention is the concept of the text – the deep rolled structure of the text” (Krasnykh, 2012, p. 305), which should be transformed into the surface structure of the text as a student's speech product in the process of learning.

To solve the problem we identified, one more concept was important, which is the interpretation of the text as revealed by many psycholinguistics (Gak, 1974; Dridze, 1981; Zhinkin, 1982; Golod & Shakhnarovich, 1984; Kubryakova, 1987; Tarasov, 1997) through two interrelated acts: restoration of the structure of communication in the text, i.e. placement of the text model in the structure of the communicative act.

For Kazakhstan, the cognitive-communicative technology of bilingual education in non-language disciplines (Bulatbayeva, 2016) is more acceptable in the absence of an English-speaking natural environment. The ways of solving the problems of professionally oriented English language education, which are corresponded to the conditions of Kazakhstan, were previously described by Fakhruddinova,

Bulatbayeva, Kondratova, Fedorova, & Petukhova (2018). The essence of the new approaches to solve the problems of bilingual education lies in 1) the mechanism for processing the content of the non-language topic through the usage of new functional units of selection; 2) the mechanism of compiling the cognitive structure of the studied theoretical material; 3) the mechanism of sequential actions on the organization of simultaneous work on the development of extra-linguistic material and specialized foreign language; 4) the developed system of exercises for each stage of the lesson; 5) the method of organizing dialogical communication on typical situations within the framework of the thematic section under study; 6) the organization of the reproductive-productive generation of a monologue utterance in a foreign language. To achieve the desired results in training, it is important to take into account the real need for English: the learned English must be actively used in professional life. One of these conditions is the greening of education (Dlimbetova, Bulatbayeva, Abenova, Fahrudinova, & Khuziakhmetov, 2018), when volunteer students show an active desire to discuss regional environmental problems not only in their own country, but also in online activities with English people.

Thus, the topic or concept predetermines both the structure of the text expected from the students and the selection of language means (first of all, lexical and grammatical), the content of the future cognitive act.

Methodology

The research methods were semantic analysis, synthesis by semantic groups, statistical method, construction, experiment (conducting classes), description of the results.

Eurasian National University named after L.N. Gumilyov, Faculty of Social Sciences and Faculty of Philology served as an experimental base for the research.

The study was conducted in three stages: selection of educational material, planning of educational process and implementation of a cycle of classes within one thematic area. Participants were students of the faculty of social Sciences of the faculty of Philology, who are environmental volunteers and want to improve the English language for participation in international events.

To achieve this goal of integration, we have selected environmental regional material for active discussions in English, planned 5 classes, which were held with students who are environmental volunteers in the form of additional classes.

Results

Topic of the first lesson is 'Ecology of atmospheric air in Ust-Kamenogorsk'. Speech intentions of ecological content at the lesson were to characterize the atmospheric air of the area according to the content of harmful substances, to describe the content of the activities of the responsible organization, to ask public relevant questions on environmental problems, to indicate specific violations of environmental norms and the causes of their occurrence.

At the initial stage, it was planned to master the active vocabulary selected on the basis of a number of texts on this topic. In this case, the key vocabulary from the text is worked out before acquaintance with the text. This immediately demonstrates a parallel English-Kazakh or Russian-English active vocabulary (depending on the language of education), accompanied with the images: annual average content; atmospheric air; toxic substances; pollutants; hazards of the first degree; monthly analysis; constitutional right; unfavourable situation; motor oil; soil pollution; construction of petrol station.

Listening tasks for practicing orthoepy skills, imitative exercises, and an exercise to restore English names of environmental concepts from pictures help to activate vocabulary.

At the next stage, it was planned to introduce slides about the problem of waste disposal and recycling (pptcloud.ru/biologiya/problema-...) into the course of the lesson (educational process). For example, in the first lesson of the module in this video, two young people talk about their system observations of the state of the atmospheric air of their city due to industrial emissions. In the video, the authors for the credibility of their story cite a link to a TV program that tells about the Declaration of a state of emergency because of the smog in calm weather. For students, an important step is a fragment of decision-making, when the problem is named, then several ways to solve the problem is offered and impossibility of their implementation for one reason or another is explained. In the end, the best way to tackle the problem is given. This question-answer fragment is repeated at the stage of dialogue training (stage 3), but with the voicing of the problem and solutions in English. This is an effective material, as it is realized first in the native language, then the same material with a full understanding of the content already voiced in English. After preliminary preparation of students for understanding the environmental problem in general, a text on ecological problems is proposed for introductory reading (Environmentalists told how scary to live in the East Kazakhstan region // [https://yk.kz/news/show/7170? Print](https://yk.kz/news/show/7170?Print)). The amount of text is 256 words. Students are already familiar with key vocabulary of this text in Russian and English. While working with the text, the stage of building the semantic structure of the text is important for deducing and understanding its essence and transmitting it in the future in English. The text refers to the journalistic style; it is adapted to the level of students. All necessary and objective information is taken from real life. In the course of the lesson, work is planned with additional near-nuclear vocabulary, which includes benzo pyrene, phenol, formaldehyde, sulfur and nitrogen dioxide; worsened; ecology in the region; measures are being taken; changing adverse situation; harmful fumes; environmental protection; contaminated soil and groundwater; poured onto the ground; exceeds; the numbers above (high); nobody is controlled. At the final stage, the students come to an independent discussion of five to ten sentences.

The second lesson continues in the same thematic area of the lesson. The theme is new 'The problem of gardening in Ust-Kamenogorsk'.

Speech intentions of environmental content in the lesson: to characterize the level of landscaping; uncover the role of greening in environmental protection; point out the discrepancy between the content of documents on landscaping and the true state of affairs; to assess the existing plans for landscaping the area; describe the process of landscaping; to reveal the role of near-road living hedges in the protection of atmospheric air from harmful automobile emissions.

Active vocabulary for learning (for brevity, we give only the English version): city greening; harmful factors; environment; sanitary protection zones; planting green space; greening rules; city building; creating a decorative look; flowers and grass; placing the flower beds; bushes. Video film is about the problem of gardening in Ust-Kamenogorsk 'On the problem of gardening in Ust-Kamenogorsk'. A training text is about poor-quality landscaping 'Gardening at C grade' (<http://yk.kz/news/show/17961>).

The third lesson continues in the same thematic direction of the lesson. The topic is 'The problem of disposal of solid household waste in Ust-Kamenogorsk'.

Speech intentions of environmental content in the lesson are to address the problem of improper disposal of solid household waste, quantify solid waste, indicate the lack of sorting and recycling of solid

household waste; indicate the increasing volume of municipal solid waste in the area, point out the inaction of local executive bodies, point out the absence of title documents of most municipal solid waste sites, point out the inconsistency of the existing landfills with environmental and sanitary-epidemiological requirements and their consequences.

Under the third theme, active vocabulary is given (recycling solid household, garbage; polygon; dumps; ground water). The lesson is also provided with a video (about the problem of disposal of solid household waste <https://www.youtube.com/watch>) and an educational adapted text 'Garbage needs order' (<http://yk.kz/news/show/39519>). Based on the selected educational material, in the second half of the lesson, students are given situations in which they are trying to really discuss problems in English, while using the entire existing arsenal of English-language thematic vocabulary that has been collected over two to three hours.

The fourth lesson continues in the same thematic area of the lesson. The theme of the class is 'Ecological problems of the Irtysh River'.

Speech intentions of environmental content in the lesson: to characterize the state of the Irtysh River; ways to prevent wastewater discharges from enterprises; reveal the peace-loving policy of Kazakhstan.

Active vocabulary on the topic: wastewater, pollution, heavy metals, fish death, litter on the shore, zinc, copper pollution, water purification, allocated on the basis of a video fragment (Transboundary Irtysh River on the verge of an ecological disaster [//youtube.com/watch?v=okMPgdgOYC4](https://youtube.com/watch?v=okMPgdgOYC4)) and the text "Ecological problems of the Irtysh River" (Frolova, 2006).

The selected environmental material was correlated with the main stages of the lesson: the inclusion in the environmental theme of communication and the formation of vocabulary on the topic, the formation of the grammatical structure of speech and the simultaneous activation of thematic vocabulary, the development of dialogical speech on key microthemes and the development of monologue speech as a holistic expression.

The stage of formation of the conceptual apparatus and enrichment of vocabulary on the topic (50% of the English language / 50% of the Russian language) is characterized by a holistic presentation of the material in the form of a hierarchically organized cognitive structure. Microthemes of the studied information serve as such structure. Continuous text is not attractive at the stage of familiarization with the topic. For the purpose of systemic perception of a new material, it is important to prepare a semantic table with basic information on a new topic, first in the native language. Through this table and dialogue at the lesson is an active learning material. In this way, a psychologically positive atmosphere is ensured, as students actively participate in discussions on microthemes, which are presented sequentially. At the next stage, the material covered is presented in the form of a table in English. The main objectives of this stage are to consolidate the content of the material and enrich the vocabulary. In drawing up the table and subsequent exercises, the level of proficiency in the foreign language of students is taken into account. Mastering a new vocabulary occurs by discussing each microtheme and various exercises on correlating words according to semantics (paradigmatic and syntagmatic links), filling out diagrams, tables, working with maps, etc. This method ensures students' interest in the environmental topic and at the same time forms the skills of speaking in English language. It should be noted that for the implementation of the cognitive approach a large role is played by relations and connections between lexical units, such as lexical-semantic groups of words, antonymic pairs, groups of synonyms and single-root words.

The second stage of the lesson is the consolidation of the main provisions of the material under study and thematic vocabulary, the development of active types of grammatical structures (50% of the English language / 50% of the Russian language). In selecting the grammatical material we rely on the new semantic classification of syntax structures proposed by Bulatbaeva (2004). We give them: the subject and his physical action; subject and his psychological action; the subject and his intellectual action (including speech / mental); the subject and his socio-ethical action; subject and his movement; subject and his characteristic (characteristic): permanent / temporary; by location; on time, etc.; subject and his status in relation to someone (kindred, age, social), the presence of something / someone from someone / something; the absence of something / someone from someone / something; state, property, characteristic; subject and ownership of it; the subject and the alienation of something from him; the subject and the exchange of it for something; subject and lack of anything; subject and his transformation, change; many subjects and their relationships; the whole and the parts in their relationship; comparison of what / someone with anything / anyone; restriction / prohibition of something; possible / impossible, expected, desired / undesirable action, state, property; subject and his emotional and evaluative attitude to anything / someone. For lingua-didactics, an important aspect is that semantic types of utterances serve any topic: whatever the person says, he operates on the above listed semantic types of elementary utterances. The fundamental principle of selection is the principle of the frequency of use of certain semantic types of elementary statements within the framework of a particular topic. In the experimental material, key constructions selected the following: the subject and his physical action (people clean, clean, plant trees, recycle, sort); the subject and his socio-ethical action (the public is in favor / against ...; the population is fighting for ...; residents are watching ...; departments could allow); subject and his characteristic (characteristic): permanent / temporary; by location; by time, etc. (atmospheric air contains ... / content exceeds; old dumps are closed and new ones are opened without taking into account new technologies); the presence of something / someone from someone / something (75 names of harmful substances are present; there are 88 gas stations); the absence of something / someone from someone / something (polygons do not have title documents); state, property, characteristic (one can only guess); the subject and the alienation of something from it (taken out, buried, destroyed, given away, given away, etc.); restriction / prohibition of something (it is impossible to litter; you cannot be wasteful, etc.); possible / impossible, expected, desirable / undesirable, necessary action, condition, property (it is necessary to reflect in the media, it is important to establish, it should be cleared).

To activate the lexicalized grammatical material, the following tasks were proposed: 1) Express this thought more specifically, complementing the information with answers to the following questions "where? when? why? for what purpose? for what reason?" ; 2) Discuss with the partner the using the constructions "... ..", "... .." // Discuss with the partner using the constructions "...", ".....". Sample design: Reference words: ...; 3) Give the definition of the '.... using the construction "....." // Define the notion of "....." using the construct "... ..". Sample design: ... Reference words: ...; 4) Answer the question using the construction "... ..": "... .." // Answer the question using the construction "... ..": ".....?". Sample design: ...

Reference words: ...; five) . Find statements in the text, which characterize: "..."; "..."; "... .." // Find in the text statements that characterize: "... .."; "....."; "... .." Key words for the selection of statements: ... Learn to express different thoughts about time, reason ... Imagine different combinations of statements from these fragments; 6) Productive exercise: Express syntax: "....." // Express this thought in

other ways, using synonyms: ".....". Synonymic features: ... // ... //; 7) Write out from the English texts ("...") And. // Write out from English texts (".....") and apply these methods in your own communication ("... .."). Keywords for the selection of statements:

The third stage of the lesson is the formation of the skills of dialogic communication within the key fragments of the material being studied (70% -80% of the English language / 30% -20% of the Russian language). The peculiarities of this stage were the repetition and refinement of the material studied in English, mastering the skills and ethics of communication. First of all, individual intentions on the topic were worked out, since bringing them to automatism gives students confidence in the dialogic communication. The teacher created the most natural situations in the classroom. For this, he selected 2-4 typical situations for discussing key micro-topics on a thematic cycle. Students developed the ability to initiate communication through a question, respond verbally to a question, initiate the interlocutor's speech action with an impulse, respond verbally to an impulse, express positive or negative emotions towards the interlocutor, respond to positive or negative interlocutor's emotions. At the same time, the skills of speech etiquette were formed through various supports and exercises. Students worked out all situations and exercises in class, using the information received on the environmental problems of the region.

The fourth stage of the lesson is the synthesis of ecological information and means of the English language in monologue speech (90% of the English language / 10% of the Russian language). In the process of learning monologue speech is one of the important types of speech activity. Each session of the thematic module organizes the presentation of monologue speech in various forms (oral report, pre-prepared report, English-language presentation of slides, writing a newspaper article in English, etc.).

After conducting 4 lessons on topics of one thematic area and independent work of students to improve their skills, the 5th control lesson was held to identify the level of English-speaking communicative competence “Our recommendations for solving environmental problems in the region”.

The goal of the research has been achieved: students spoke in English on given topics, discussed materials on environmental slides. For example, volunteer students give specific recommendations such as “For proper disposal of solid household waste in the republic, in our opinion, improvement of the management system is necessary”, “It is necessary to develop incentive economic methods for separating solid household waste”, “Improve waste disposal methods in accordance with requirements of sanitary norms and rules ", " It is necessary to develop systems for transporting solid household waste to landfills, as well as to explore the experience of other countries ", " Sanitary cleaning should be carried out community of the region ", " We need to develop a general plan for the movement of municipal solid waste for the area, towns and villages; transportation scheme for waste sorting stations ”,“ Urgently introduce waste separation technology into non-recyclable and waste fractions ”,“ In cities it is necessary to create waste recycling enterprises ”. The same recommendations were made on the problems of air purification and landscaping.

The level of English-speaking ecologic-oriented competence of student volunteers has increased significantly. This is evidenced by the results in all aspects, which are presented in the comparative table (14 volunteer students participated (100%)):

Lexical speaking skills through listening and reading	Grammar Speaking Skills	Dialogue skills	Monologue speech skills
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observance of orthoepic norms in reading (before and after the experiment)		Spreading the basics of key environmental propositions		ecological and thematic information content of student's replicas		the ability to logically and consistently disclose the discussed environmental topic	
4(28%)	1 3(93%)	3 (21%)	14 (100%)	2 (14%)	1 1 (78%)	1 (7%)	1 0 (71%)
handling keywords as part of a sentence-statement on an environmental topic (before and after the experiment)		expressing complex ideas on an environmental problem through complex sentences		diversity of speech intentions (informative, motivating, interrogative, etiquette) in replicas of environmental content		compositional correctness of ecologic-oriented monologue	
3 (21%)	1 0(71%)	1 (7%)	8 (57%)	1 (7%)	1 2 (86%)	1 (7%)	1 3 (93%)
possession of a sufficient number of words on the microtheme within the framework of the environmental topic (before and after the experiment)		expression of one ecological thought in different ways (sentences-synonyms)		replica aesthetics (the presence of incomplete structures, the absence of unjustified pauses) on environmental topics		confirmation of their thoughts with authoritative statements on the problem of ecology (citation)	
1 (7%)	1 0(71%)	0 (0%)	7 (50%)	1 (7%)	9 (64%)	0 (0%)	1 4 (100%)

The described level of English communicative competence became possible on the basis of consistent actions to form lexical and grammatical skills of speaking, dialogical and monologue speech skills on specific regional environmental material that excites every resident of the country. The main conclusion of the study was that in the conditions of Kazakhstan, the English language will be in demand when it is studied for real everyday communication tasks. Today, one of such factors of demand for environmental volunteers is the environmental problems of the region and the need to discuss them at international events. These were online seminars and online conferences of leading universities in the world with working English, in which environmental volunteers from the Eurasian National University named after A. L.N.Gumilev.

The experience of English-language training of environmental volunteers shows that it is important for students to choose the aspect of the activity in which they are or will be in the future.

Discussion

Currently, integrated learning of a foreign language and another subject of the natural science or technical cycle has been successfully solved by means of CLIL technology (Coyle, Hood, & Marsch, 2010)

has recently become increasingly popular in teaching English. Otherwise, CLIL is the study in English (or other foreign language) of all or several subjects of the school curriculum. To use the CLIL-approach, teachers need to be fluent in a foreign language and specialized vocabulary. The weak points of using the CLIL-approach in Kazakhstan are the initially low level of English-speaking competence; lack of the required level of proficiency in a foreign language among teachers of non-linguistic subjects; lack of English-speaking human resources potential: lack of necessary linguistic and methodological knowledge of teachers of non-language subjects and professional knowledge of teachers of a foreign language; lack of necessary textbooks in the specialty in a foreign language; the lack of methodological advanced training courses for teachers who implement CLIL, etc. The CLIL approach contains certain risks: difficulties in organizing the educational process; increasing the burden on students and teachers; At the early stage of CLIL implementation, the teaching of special and narrowly professional subjects in a foreign language can adversely affect the process of mastering the subject itself.

The main distinctive feature of the cognitive-communicative technology used by us is bilingual education for non-linguistic topics within each lesson (parallel-sequential presentation of the entire module), processing the material under study based on the latest achievements of linguistic science. Such processing allows you to remove unnecessary lexical and grammatical structures that distract the student's attention and reduce interest in the subject. Minimizing educational material allows students to think independently when combining key fragments of a topic based on basic lexical and grammatical units. Thus, the minimized and structured educational material is first assimilated in the native language, and then the language code is changed to English, which removes the problem from understanding the meaning. This is the best option in the language situation of Kazakhstan, when schools and universities are not ready for 100% English-speaking non-language disciplines, as with a lack of English, there is a risk that the content of these disciplines is not assimilated. In addition, bilingual education with a gradual increase in the share of English in the framework of the thematic module is supported by an urgent task for students, as we have shown with the example of discussing environmental issues with students and environmental volunteers.

Conclusion

According to the results of the study, we suggest the following recommendations. For active use of a foreign language in a particular country, firstly, it is necessary to find areas in which the language will be used due to the emerging need for communication in it. Artificial study of a foreign language does not lead to the desired foreign language speech communication. In conditions of a low level of proficiency in a foreign language, the process of mastering the mandatory standard of knowledge in non-language subjects cannot be put at risk. A more optimal way is bilingual learning using cognitive-communicative technology, which has been tested in practice. The technology requires special planning and functional semantic processing of the text, translating its content into the speech and intellectual property of students through speech intentions as speech tasks in the exercises. For the successful use of the proposed bilingual technology, the key learning units will be speech intentions that are the driving force in both cognition of a fragment of reality and mastering a foreign language. Speech intentions serve as a basis for the formation of foreign communicative competence, as well as a prerequisite for the selection of active vocabulary and syntactic structures. At the same time, a new semantic typology of statements is proposed for the first time.

References

- Austin, J. L. (1962). *How to do things with words*. New York: NY Press.
- Bulatbaeva, K. N. (2004). Semantic Types of Elementary Statements as the Units of Teaching Russian Grammar in Foreign-Language Speaking Audience. *L. N. Gumilyov Eurasian National University*, 1, 116-123.
- Bulatbayeva, K. N. (2016). *Cognitive-Communicative Technology of Bilingual Teaching in Non-Linguistic Disciplines: Theory, Planning, Implementation*. Paper presented at the X International Scientific-Practical Conference, Kazan, Russia.
- Coyle, D., Hood P., & Marsch, D. (2010) *CLIL: Content and Language Integrated Learning*. Cambridge University Press.
- Dlimbetova, G. K., Bulatbayeva, K. N., Abenova, S. U., Fahrutdinova, G. Z., & Khuziakhmetov, A. N. (2018). Management of ecologization of professional education. *Ekoloji*, 27, 1217-1225.
- Dridze, T. M. (1981). Social-Psychological Aspects of Text Production and Interpretation in the Speech Communication Activity. *Aspects of Texts Study*, 129-136.
- Ecologists Told How Dangerous to Live in East Kazakhstan Region. (2010). *YK.kz Site Number One in Ust-Kamenogorsk*. Retrieved from <https://yk.kz/news/show/7170?print>
- Fahrutdinova, G. Z., Bulatbayeva, K. N., Kondratova, O. I., Fedorova, S. N., & Petukhova, O. A. (2018). Updating of Language Training Content in Kazakhstan: Implementation of New Linguodidactic Approaches. *Language. European Scientific Language Journal*, 239-255.
- Fillmore, C. (1982). *Frame semantics In Linguistics in the Morning Calm*. Seoul: Hanshin.
- Frolova, E. (2006). *Ecological Problems of Irtysh River. Scientific Practical Portal Ecology of Production*. Retrieved June, 2006, from <http://www.ecoindustry.ru/magazine/archive/viewdoc/2006/6/688.html2>
- Gak, V. G. (1974). *On Semantic Organization of the Text. Text's Linguistics*. Paper presented at the Scientific Conference, Moscow, Russia.
- Garbage Must be Thrown. (2017, July 27). *YK.kz Website Number One in Ust-Kamenogorsk*. Retrieved July 27, 2017, from <http://yk.kz/news/show/39519>.
- Golod, V. I., & Shakhnarovitch, A. M. (1984). Cognitive and Communicative Aspects of the Text as an Instrument of Communication. *Voprosy Psikholingvistiki*, 13, 26-34.
- Krasnykh, V. V. (2012). *Basics of Psycholinguistics: Lecture course, second edition, supplemented*. Moscow: Gnozis.
- Kubryakova, E. S. (1987). Text – Problems of Comprehension and Interpretation. *Structure and semantics*, 93-94.
- Leontiev, A. A. (1999). *Basics of Psycholinguistics*. Moscow: Smysl.
- Minsky, M. (1988). *Frames for Representing the Knowledge. New in Foreign Linguistics*. Moscow: Progress.
- Problem of Greening in Ust-Kamenogorsk. (2018, April 2). *RTRK Kazakhstan*. Retrieved from <http://oskementv.kz/ru/news/society/ozelenenie-ust-kamenogorska>
- Problem of Solid Waste Utilization*. [Video file]. (2015). Retrieved November 5, 2015, from <https://www.youtube.com/watch?v=PH4wUh-9qc4>
- Problem of Waste Utilization and Its Recycling. (2009). *Online Resource for Presentation PPTCloud*. Retrieved from pptcloud.ru/biologiya/problema-...

- Sharandin, A. L. (2017). Aspektnye opredeleniya slova i ikh otrazheniye v slovare [Aspect definitions of the word and its reflection in the dictionary]. *Yazykovaya lichnost: aspekty izucheniya*, 373-394.
- The President of the Republic of Kazakhstan, Nursultan Nazarbayev's Message to the Citizens of Kazakhstan (2007). *New Kazakhstan in the new world*. Retrieved from http://online.zakon.kz/Document/?doc_id=30090760
- The President of the Republic of Kazakhstan, Nursultan Nazarbayev's Message to the Citizens of Kazakhstan. (2012). "Kazakhstan-2050 Strategy": New Political Direction of the State. Retrieved from http://online.zakon.kz/Document/?doc_id=31305418
- The President of the Republic of Kazakhstan, Nursultan Nazarbayev's Message to the Citizens of Kazakhstan. (2014). *Nurly Zhol – The Path to the Future*. Retrieved from <https://uchet.kz/news/poslanie-glavy-gosudarstva-narodu-kazakhstana-2014-quot-n-1200-rly-zhol-put-v-budushchee-quot/>
- Tarasov, E. F. (1997). *Language Cognition and World's Image (preface)*. Paper presented at the XII International Symposium on Psycholinguistics and Communication Theory, Moscow, Russia.
- Transbordering Irtysh River in the Doorway to the Ecological Disaster*. [Video file]. (2013). Retrieved August 9, 2013, from [youtube.com/watch?v=okMPgdgOYC4](https://www.youtube.com/watch?v=okMPgdgOYC4)
- Trinity of Languages. (2015, August 5). *Kazinform*. Retrieved from https://www.inform.kz/ru/tryedinstvo-yazykov_a2814770
- Unsatisfactory Greening. (2018, June 28). *YK.kz site Number One in Ust-Kamenogorsk*. Retrieved from <http://yk.kz/news/show/17961>
- Van Dijk, T. A. (1989). *Context and Cognition. Knowledge Frames and Speech Act Comprehension*. *Language. Cognition. Communication*. Moscow: Progress.
- Zhinkin, N. I. (1982). *Speech as an Information Conductor*. Moscow: Nauka.