PROFESSIONALLY FOCUSED READING WHILE STUDYING ENGLISH

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ABSTRACT

Professionally focused reading by students of nonlinguistic specialties has always been a topical issue for University English language teachers. The purpose of the article is to characterize methods of selection and ways of assessment a text as an educational unit in the process of teaching English for specific purposes and in order to form different foreign-language speech activities. The leading method to research this problem is linguistic statistics that allows studying of the quantitative regularities of a natural language, which are shown in texts. The main results of multidimensional linguistic statistics research of texts of technical sublanguages, concerning selection and an assessment of the educational text are stated. The analysis of texts on specialty gives the chance to estimate texts on this or that aspect of complexity or a terminological saturation and to select the text in educational process with a certain methodical focus. Materials of article can be useful for university foreign language teachers.

Keywords: Professionally focused reading, linguistic statistics, educational texts, ELT

INTRODUCTION

The aspect of reading foreign language texts focused on specialty in the system of teaching English for specific purposes is considered not only as one of the types of foreign-language speech activity, but as a base for training such aspects as writing, listening and speaking. The abilities connected with extraction of the arriving information are the cornerstone of this type of speech activity. Thus, reading is a tool for formation of professional communicative competence. It is known that the problem of selection of educational texts for training during a foreign language teaching process is multidimensional.

The numerous works of methodologists are devoted to the problems of the phenomenon of "educational text". The common feature that unites them is selection of optimal solutions of problems and ways to assess the text as educational unit in process of training to different foreign-language speech activities. Results of multidimensional linguistic statistic research of texts, results concerning selection and an assessment of the educational text with a support on linguistic statistics and information methods are stated in the paper.

METHODOLOGICAL FRAMEWORK

The selection of professionally focused texts for students provides a number of procedures. The first criterion is professional activity, a special focus of information of the foreign-language text. This criterion considers future fields of activity (practical and scientific), situations of professional communication, and professionally significant topical issue for students. Information taken from texts is used in the process of communication on scientific or production and practical topic within the professional sphere of communication. Language is a universal method to transfer social experience. Moreover, conscious, purposeful and expedient transfer of social experience is an essence of education and vocational training. The careful

analysis of the syllabus of each technical specialty and consultation with representatives of profile departments accompany procedure of selection of professionally focused texts.

The first stage includes acquaintance with syllabus of specialties of higher education institution. It helps to choose the leading topics of specialty that allows defining "a selection sign" for formation of a sample. The sample is the set of units (in our case – of texts) which are selected from population united by the general sign here. The fact of studying special literature as motivation is of great importance and indisputable. Students will study these sources of information with interest and satisfy their informative requirements, i.e. correspond to their professional interests.

It is necessary to search for texts on specialty that meet the following requirements:

- 1. Texts should be authentic and are taken from different types of publications: journal articles, essays, monographs. Such texts reflect the authentic language use and initially they are not intended for the educational purposes. In terms of linguistic, the chosen texts have to meet modern lexical and grammatical standards of the studied language. The degree of participation of cognitive processes of students in this type of speech activity increases. A specific place is held here by thinking and especially such cogitative operations as the analysis and synthesis. All previously mentioned gives the grounds to claim that possession of ability to read authentic texts is a push for the educational, self-educational and developing potential of students.
- 2. Text should cover the problems connected with topical issues for this specialty according to the syllabus.
- 3. Texts should have informative value.
- 4. Texts should not contain obsolescent information.

The urgency of rapidly changing information is of paramount importance for the selection of material. Preference should be given to texts reflecting the state of the problem in recent years. Students are given an opportunity to compare a condition of a problem in their native and in foreign language and in both cultures, to comprehend critically and by that to enrich own picture of the topical issue in professional field or general information in the world. It leads to formation and development of informative competence and activity and induces to mastering professional communication using a foreign language for broadcasting their knowledge and an exchange of opinions with other students.

5. Texts should represent modern literature for the last five years.

The second stage includes the linguistic statistics and information analysis of the texts selected at the first stage for the purpose of their assessment on:

- 1. Degrees of compliance with this or that specialty.
- 2. Information capacity.
- 3. Degrees of a terminological saturation.
- 4. Lexical informational content and variety.
- 5. Grammatical complexity.

At the third stage the assessment of the selected texts as educational units, their distribution on types of complexity, suitability for a grade level, types of reading, certain forms and techniques of work with texts, etc. were carried out. It is shown that quantities of objective difficulty and readability of the text are in inverse relation: the text is more difficult, the less it is readable. For the characteristic of the text, it is enough to use one of these parameters.

DISCUSSIONS

In methodical literature, there are works devoted to research of correlation of objective and subjective difficulties of the text and definition of a measure of objective difficulty and its readability. Some authors placed the main emphasis on assimilation of functional English lexicon by students, on correction of grammatical knowledge and expansion of lexicon of trainees. Considerably to optimize the existing traditional system of work with the text on pretext, text and post text stages allows the so-called denotation analysis of the text described by L.B. Zdanovskaya.

Taxonomy of four characteristics of the text (readability, clearness, complexity and difficulty) assumes the accounting of strictly limited list of parameters that allows excluding different interpretations of these terms, and also promotes removal of the unified formulas of difficulty of the text for concrete target groups with creation of the corresponding scale of indexes.

RESULTS

The analysis of the above-stated literature shows that for definition of a measure of objective difficulty of the text authors were limited to a ratio of characteristics of syntactic and stylistic levels of texts. For the solution of our task - selection and distribution of texts on stages of a high school course for accumulation of knowledge by students and development at them certain skills - it was necessary to characterize lexical and grammatical levels of the text. Therefore, the objective assessment of difficulty had to include estimated parameters of the text such as degree of informational content of the text, degree of its lexical novelty, its grammatical complexity, etc.

The choice of parameters for an assessment of the text is taking into according to characteristic of this or that side of internal structure of the text. Their various combinations can be accepted as selection criteria. For obtaining estimated parameters at the lexical, grammatical and syntactic levels the statistical analysis was carried out.

The list of qualitative and quantitative characteristics of the text is established. The following estimated parameters were obtained:

Degree of Compliance of the Text of Each Specialization

If at the first stage of work with texts on specialties they are chosen on the basis of scientific intuition and have subjective character, then the statistical analysis of the text allows to receive an objective quantitative assessment of degree of compliance of the text of this specialization and either will confirm, or will disprove value judgment. For this purpose serves:

- a. Statistics of special vocabulary in the text.
- b. The degree of term hood in lexical structure of the text.

The terminological structure of the text includes the terms coinciding with the terminological minimum necessary for studying English as a foreign language according to the syllabus and the terms that are not entering it. The terms coinciding with the specified minimum characterizes the terminological value of the text.

Information Capacity of the Text

Information capacity shows the general ratio of lexical and grammatical semantics of the text. Information capacity is defined by continuous calculation of descriptors - the words and phrases making a certain sense unlike syntactic words which value only auxiliary and which, being taken from the text, do not bear information on its contents.

Lexical Informational Content of the Text

The degree of compliance of the thesaurus of the text to the thesaurus of student as lexical informational content of the text is taken. In this case, the thesaurus of the text is lexical structure of the text; the thesaurus of the student is a lexical vocabulary, a number of the words of the text known to the student. This value is subjective because the vocabulary of each student is individual. However, for all students this size approaches some to average, representing the number of words that the student has to know. This size is also dynamic and increasing. In the course of training, there is a continuous process of accumulation of knowledge and the lexical vocabulary of the student increases.

Lexical informational content is the important information characteristic of the text. Showing degree of its novelty, and, therefore its values, it gives the chance to define the number of the new words unknown to the student at this grade level.

However, it is very important to use this characteristic of the text in the methodical purposes carefully. First, the numerical size of this parameter should not exceed the maximum norm at which studying of the text becomes impossible from the point of view of perception and memorizing. Secondly, text value concerning its lexical informational content can be considered differently depending on a type of reading and training. At last, the numerical size of this parameter has to be regarded differently depending on qualitative structure of new words. If new words of the studied text coincide with the list of a basic word lexicon, then the text is selected. If its words are rare, not peculiar to this specialization and are not included into a basic word vocabulary, such text will hardly be of value as educational. The teacher should take into account the fact that most of students "study" the specialty using foreign language for the first time. From this, it follows that texts have to be feasible for students. It is necessary to consider also that the teacher is not "a narrow expert" in the field. In other words, difficulty of the studied texts for reading in a foreign language has to increase gradually, from simple - to difficult. Thus, acquaintance to specialty begins with reading popular scientific texts, and then students continue to read narrow-purpose texts on the studied specialty.

It is rational to define grammatical informational content of the text by analogy with lexical informational content. The generalized characteristic of grammatical complexity of the text to an assessment of grammatical level of the text is applied as an assessment. Grammatical complexity of the text is functionally connected with the length of the sentences of the text.

Lexical Variety

Between the two texts, that one will be more difficult which includes the bigger number of different words. The comparative analysis of 10 texts on the specialty were carried out that allowed to determine text saturation degree by terminological lexicon that in turn gives the chance to apply the text to this or that grade level (see table 1).

Table 1 MATRIX OF ESTIMATED PARAMETERS OF THE TEXT											
No. of the text	Degree of	Information	Lexical informational	Grammatical informational	Lexical variety						
	compliance of the text with specialty	capacity	content	content							
Institute of fundamental medicine and											
biology Text 1.	0,348	0,131	0,427	0,025	0,046						
Text 2.	0,334	0,083	0,411	0,030	0,048						
Text 3.	0,335	0,118	0,437	0,028	0,024						
Text 4.	0,330	0,184	0,411	0,029	0,019						
Text 5.	0,339	0,216	0,422	0,030	0,046						
Institute of Geology and petroleum technologies											
Text 1.	0,238	0,098	0,326	0,025	0,008						
Text 2.	0,325	0,104	0,324	0,023	0,017						
Text 3.	0,263	0,093	0,353	0,021	0,022						
Text 4.	0,276	0,086	0,354	0,023	0,026						
Text 5.	0,292	0,135	0,376	0,027	0,021						

The texts sated with lexical and grammatical difficulties can be ranged by types of reading and on grade levels to a foreign language. Difficulty in understanding of texts is defined not by total number of words in the test but by the number of different words. Such text is not suitable for assessment at the first grade level, but it can be used for self-educational or independent work - translating and understanding of the text with the dictionary (table 2).

Table 2 QUANTITATIVE AND QUALITATIVE ANALYSIS OF THE TEXTS													
No	Specialty	Publication form	Volume of the text	Syntactic words	Significant words	Terms	Compliance of Sign. Words	Diff. use of words	New words	Sentences			
1	Medicine	Monogr.	1000	495	445	47	216	428	13	40			
2	-/-	-/-	-/-	553	383	49	251	412	15	32			
3	-/-	Journ.	-/-	574	392	22	216	439	12	37			
4	-/-	-/-	-/-	400	564	18	147	410	18	36			
5	-/-	-/-	-/-	558	376	45	121	423	21	34			
				516	432	35,8	190,2	422,4	15,8	35,8			

After quantitative and qualitative analysis of the texts, general indicators of lexicon have stated. Each selected paper in journal including material on specialty of students has about 500 syntactic words, 400 significant words among them may be about 35 terms and about 15 new words.

Another task set by the program before methodologists of higher education institutions is representation of the selected material, i.e. methodical strategy of training in reading, speaking, audition and writing. It is recommended approximately the following ratio of types of a speech: I stage: reading -65%, speaking -20%, audition -20%, writing -10%; Π stage: reading -65%, speaking -20%, audition -10%, writing -5%; III stage: reading -65%, speaking -20%, audition -10%, writing -5% thus, at all stages reading and oral speech act as the purpose and as means of education.

CONCLUSION

The analysis of texts on specialty gives the chance to estimate texts on this or that aspect of complexity or a terminological saturation and to select the text in educational process with a certain methodical focus. It is also necessary to emphasize that this approach does not exclude others that is natural in view of complexity of a methodical task - selection of educational texts for training in reading.

RECOMMENDATIONS

When choosing material for assessment of different language skills there is a necessity to make up different diagnostic educational tests including texts. Conducted analysis allow teachers of English in universities carefully select texts for such purpose in order the texts be authentic, rather informative, lexically reach and variable and filled with grammar.

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