

## ASSESSMENT OF INTERCULTURAL COMMUNICATIVE COMPETENCE OF UNIVERSITY STUDENTS BY MEANS OF ICT

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### Abstract

Modern society requires specialists being able to perceive, create, interpret and implement knowledge. Thanks to rapid development of information and communication technologies (ICT), methods of organizing learning in higher education constantly require new approaches to educational process. The majority of graduates of Russian universities are experiencing difficulty in applying for a job. Creating the most effective conditions for realization of goals and objectives of learning a foreign language in high school is today one of the main directions of educational policy.

One can't deny that today it is quite impossible to imagine learning a foreign language without the use of ICT (multimedia technology, telecommunication technology, computer technology, etc.).

In our view, a hallmark of present development and application of new information technology in teaching university students a foreign language is active involvement of non-professionals in the sphere of computer engineering. In our case such "non-professionals" are foreign language teachers. The development and use of computer based learning materials at university today is still undergoing significant difficulties, because their creation requires the knowledge of diverse sciences: Foreign language, Psychology, Pedagogy, Mathematics, Informatics, etc.

The article describes a multimedia testing system for conducting language olympiads at the university, being carried out with the help of telecommunication technologies. Main tasks, components and technical, didactic, methodical, psychological-pedagogical characteristics of this testing system are specified. The system makes it possible to assess the level of intercultural communicative competence of university students in such kinds of speech activity as reading, writing and listening. The article defines the main goals of foreign language olympiad at the university for the university students. It is underlined that language olympiad analysis with the help of new information technologies facilitates monitoring educational process enabling teachers timely to correct the contents of education at the university.

**Keywords:** information and communication technologies, intercultural communicative competence, higher education

## 1. INTRODUCTION

It is no exaggeration to say that today the increased competition in the context of growing globalization led to the fact that the knowledge of English, the language of international significance, is a prerequisite for successful professional career of University students. Ready-made information technology products for estimation of proficiency level of foreign language of University students today is not a rare phenomenon. They allow assessing the level of foreign language competence of students by application of trustworthy educational strategies.

## 2 OPINIONS AND DISCUSSION

Orientation of the national education system to a competence approach in the content of education finds its expression in the field of teaching foreign languages while the formation of intercultural competence as an indicator of a person's ability to participate effectively in foreign language communication at intercultural level. The specificity of targets and content aspects of foreign language education in the context of intercultural paradigm makes a student be the central element of the element-level model in the process of intercultural communication.

During the last decade a number of studies devoted to the competence approach in foreign language education has been performed:

- communicative-oriented teaching and the formation of foreign language communicative competence on speech activity types (G.K. Borozhenets, I.S. Guseva, V.I. Leushina, and V.M. Mazo, I.A. Megalou, O.Yu. Levchenko, O.V. Fedorova, et al.);
- the formation of certain types of skills (N.I. Almazov, N.A. Biryukova, L.M. Bosova, L.A. Kareeva, T.V. Litvinova, O.V. Syromyasov, et al.) [Biryukova, 2015; Kondratenko, 2016];
- development of professional language competence (A. P. Petrova, A. N. Kuznetsov, Y. E. Kuznetsov, T. S. Makarova, M. V. Matkova, M. V. Ozerova, et al.).

For the first time a definition of communicative competence gave D. Hymes (D. Hymes, 1972), adding the concept of "linguistic competence", given N. Chomsky [Chomsky, 1972]. He claimed that the saying has its own rules, which are subject to the rules of grammar, and learning which provides the ability to use language in the communication process [Hymes, 1972].

A. Halliday defines communicative competence as an internal willingness and ability to speech communication [Halliday, 1973]. Later the description of communicative competence was given by van Ek on the basis of the Council of Europe specifications [J. van Ek, 1989]. He believed that communicative competence includes the following subcompetences: linguistic competence, sociolinguistic competence, discourse competence, strategic competence, and sociocultural competence.

Communicative competence, according to I. A. Zimnyaya, is "formed by the person's ability to speak as a subject of communicative activity" [Zimnyaya, 2003]. Intercultural communicative competence is considered by many language teaching professionals as an extension of communicative competence.

We adopt E. I. Litnevskaya's point of view, according to which "foreign language competence is "the ability to possess all types of speech activity and the basics of speech culture, writing, the basic skills of language use in the vital spheres and situations of communication at a given age" [Litnevskaya, 2006]. Intercultural communicative competence is considered by many language teaching professionals as an extension of communicative competence.

## 3 METHODS OF ASSESSMENT

There will always be some subjectivity in assessing ICC. There exist three concepts that are traditionally seen as fundamental to any discussion of evaluation [Council of Europe, 2001]. **Validity** demonstrates that what is actually assessed – the construct – is what should be assessed in a given context and that the information gained is an accurate representation of the proficiency of the students. **Reliability** is the degree to which the measurement data are stable. It gives accuracy to decisions made in relation to a standard. **Feasibility** means that the measure is practical and is likely to work under time limits.

Most researchers studying the essence and peculiarities of learning in a computer educational environment (A.A. Andreev, S.K. Gural, I.G. Zakharova, A. S. Lazareva, E.S. Polat, I.N. Rozina, V.I. Soldatkin, et al.) are of the opinion that training in this environment is an entirely new educational paradigm, which relies on the functional efficiency of ICT shaping e-learners. In addition, the results of many years practice in the

development and application of multimedia testing systems in the Mari state University (2000-2017) allowed us to realize that holding language competitions with the help of ICT is one of objective means of foreign language speech communication assessment of university students [Astafiev, V. A., 2013]. For higher education system monitoring the development of students' personality and their educational and professional activities is of great importance [Komelina, 2013].

In general, the goals of the foreign language Olympiad are:

- identification of students having a good knowledge of English;
- creation of conditions for intellectual development and support of gifted students;
- development of such strong-willed qualities as purposefulness, initiative, independence, determination, perseverance, endurance, discipline;
- foreign language competence development.

"The University English Olympiad" having been designed to hold a foreign language university olympiad has a number of features. Technical features:

- the system is developed on the basis of the e-learning platform Moodle;
- the system provides information of different media (audio, graphics, text);
- the system has a friendly interface;
- the system allows editing.

Didactic features:

- differentiated assessment of knowledge (depending on the time of assignments, number of assignments and level of tasks complexity);
- knowledge control with the implementation of the feedback;
- development of attention, memory, ability to analyze;
- development of competencies (educational competence, foreign language competence, information competence, etc.);
- ensuring academic autonomy;
- controlling run time of the Olympiad tasks;
- providing interactivity to learning.

Methodological features:

- availability of guidelines for tasks performance;
- comprehensive testing of proficiency in various types of speech activity (listening, speaking, reading, writing) and aspects of language (vocabulary, grammar);
- modular structure.

Psycho-pedagogical features:

- identification and development of creative abilities of young talents;
- creation of conditions for intellectual development of students;
- development of cognitive needs and aspirations of students to educate themselves;
- motivation of students to learn English [Kolesova, 2007, 2015, 2016].

In the English language Olympiad "The University English Olympiad" held in the Mari state University in March – April 2017 1075 students of 1-2 courses of Humanities (365 students), technical (276 students) and natural sciences (434 students) profiles participated.

"The University English Olympiad" is developed on the basis of the e-learning platform Moodle, which includes 4 sections:

- Listening;

- Reading;
- English in Use (Grammar, Lexis, Word-building);
- Speaking.

In accordance with the functional purpose "The University English Olympiad" includes the following modules:

- Organizational-methodical module: registration of participants, guidelines for students on working with the system;
- Practical module: open and closed types of tasks (Fig. 1), matching tasks.



Fig 1. Open type task in word-building (humanitarian profile).

- editor module, allowing changes in the assignments of the Olympiad (Fig. 2);

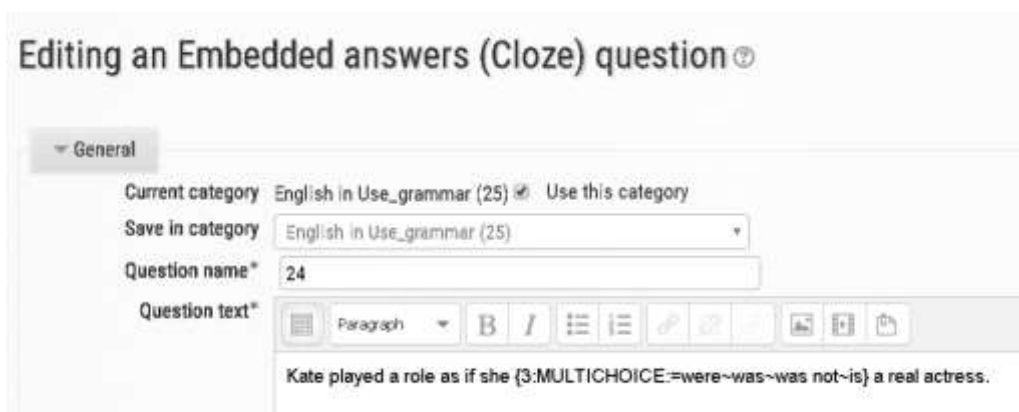


Fig. 2. Editormodule.

- **statistics module:** general and detailed results of the Olympiad, the analysis of results by question (Fig. 3).

Q#	Question type	Facility index	Standard deviation	Random guess score	Intended weight	Effective weight	Discriminative efficiency
1	Multiplechoice	76.73%	42.31%	25.00%	3%	3.22%	31.50%
2	Multiplechoice	26.50%	44.18%	25.00%	3%	1.61%	-4.10%
3	Multiplechoice	56.91%	49.58%	25.00%	3%	3.72%	29.50%
4	Multiplechoice	47.70%	50.00%	25.00%	3%	4.51%	49.51%
5	Multiplechoice	52.76%	49.98%	25.00%	3%	3.20%	17.25%
6	Multiplechoice	25.58%	43.68%	25.00%	3%	0,2 %	-14.47%

7	Multiplechoice	17.74%	38.25%	25.00%	2%	0,3%	-9.59%
8	Multiplechoice	19.12%	39.37%	25.00%	2%	0.96%	-2.54%
9	Multiplechoice	37.79%	48.54%	25.00%	2%	2.80%	27.36%
10	Multiplechoice	38.71%	48.76%	25.00%	2%	3.06%	34.55%
11	Multiplechoice	44.70%	49.78%	25.00%	2%	2.57%	20.72%
12	Embeddedanswers (Cloze)	42.17%	49.44%	25.00%	1%	2.17%	38.61%
13	Embeddedanswers (Cloze)	41.24%	49.28%	25.00%	1%	2.16%	38.23%
14	Embeddedanswers (Cloze)	29.72%	45.76%	25.00%	1%	1.41%	15.61%
15	Embeddedanswers (Cloze)	42.40%	49.48%	25.00%	1%	2.02%	32.64%
16	Embeddedanswers (Cloze)	34.79%	47.69%	25.00%	1%	0.40%	-3.15%
17	Embeddedanswers (Cloze)	69.82%	45.96%	25.00%	1%	1.92%	36.86%
18	Embeddedanswers (Cloze)	38.94%	48.82%	25.00%	1%	1.95%	30.83%
19	Embeddedanswers (Cloze)	30.41%	46.06%	25.00%	1%	0.38%	-3.10%
20	Multiplechoice	22.12%	41.55%	25.00%	1%	1.66%	27.59%
21	Embeddedanswers (Cloze)	46.54%	49.94%	25.00%	1%	2.08%	34.84%
22	Embeddedanswers (Cloze)	53.00%	49.97%	25.00%	1%	1.61%	19.12%
23	Embeddedanswers (Cloze)	38.48%	48.71%	25.00%	1%	2.17%	39.53%
24	Embeddedanswers (Cloze)	54.38%	49.87%	25.00%	1%	1.63%	19.74%
25	Embeddedanswers (Cloze)	21.43%	41.08%	12.50%	2%	2.73%	36.27%
26	Embeddedanswers (Cloze)	39.40%	48.92%	12.50%	2%	3.00%	32.98%
27	Embeddedanswers (Cloze)	32.72%	46.97%	12.50%	2%	2.60%	24.15%
28	Embeddedanswers (Cloze)	23.04%	42.16%	12.50%	2%	1.62%	6.20%
29	Multiplechoice	52.30%	50.00%	25.00%	2%	2.66%	22.92%
30	Embeddedanswers (Cloze)	30.18%	45.96%	12.50%	2%	3.02%	37.38%
31	Multiplechoice	66.13%	47.38%	25.00%	3%	2.87%	13.98%
32	Embeddedanswers (Cloze)	34.56%	47.61%	8.33%	3%	3.64%	29.35%
33	Embeddedanswers (Cloze)	26.50%	44.18%	8.33%	3%	3.45%	29.41%
34	Embeddedanswers (Cloze)	33.41%	47.22%	11.11%	3%	2.09%	0.17%
35	Embeddedanswers (Cloze)	10.37%	30.52%	8.33%	3%	0.84%	-6.99%
36	Embeddedanswers (Cloze)	28.57%	45.23%	11.11%	3%	3.12%	20.02%
37	Embeddedanswers (Cloze)	45.99%	29.58%	12.50%	10%	6.66%	37.29%
38	Embeddedanswers (Cloze)	23.16%	24.67%	0.00%	16%	8.43%	44.72%
39	Matching	82.49%	31.81%	33.33%	1%	1.65%	43.39%
40	Embeddedanswers (Cloze)	60.88%	37.70%	20.00%	1%	2.14%	47.31%
41	Embeddedanswers (Cloze)	49.06%	34.89%	0.00%	1%	2.28%	55.19%

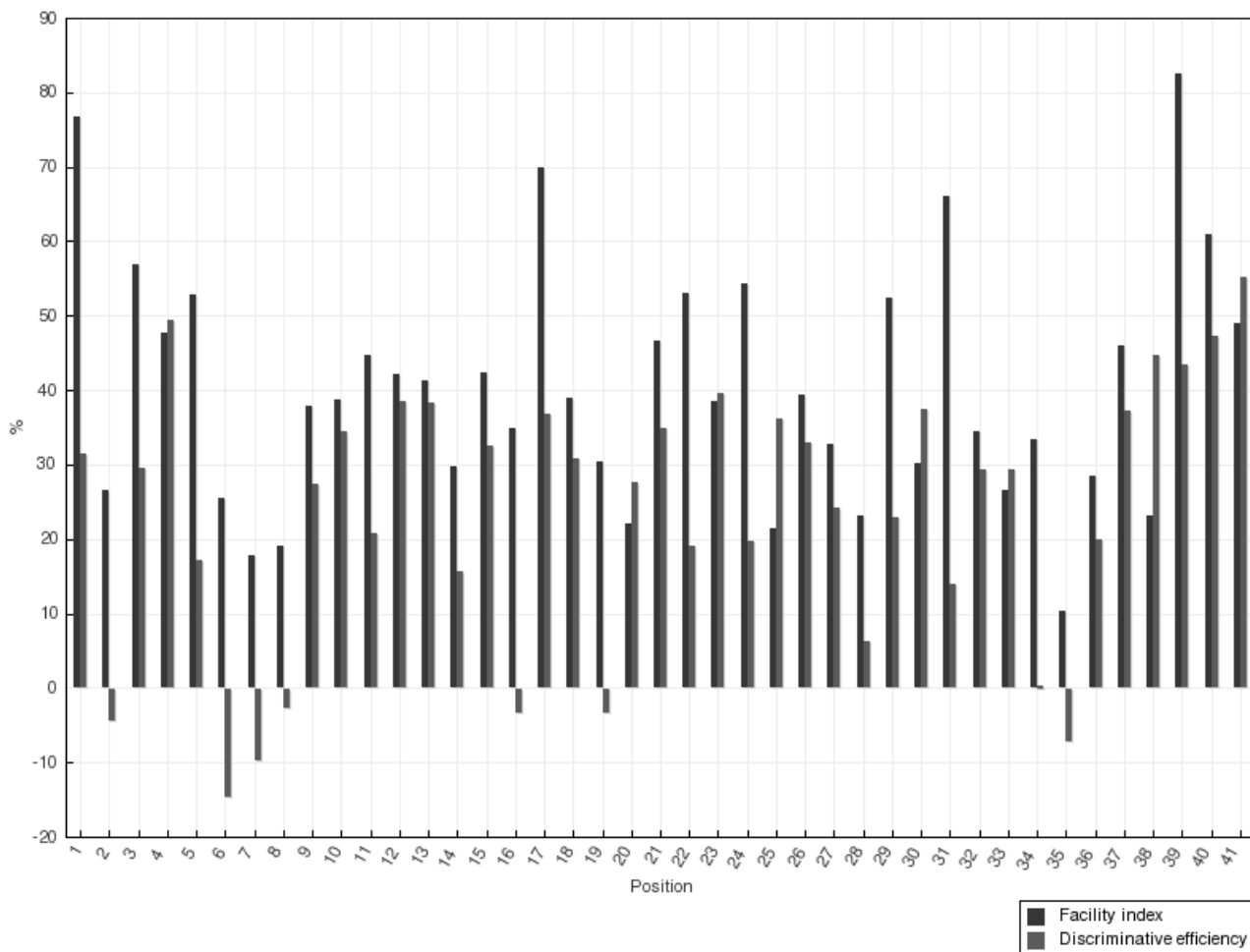


Fig. 3. Analysis of results by subject (natural sciences profile).

A wonderful opportunity provided by Moodle, is getting the automatically generated test report, which allows the analysis of statistical indicators of the test: facility index, standard deviation, random guess score, intended weight, effective weight, discriminative efficiency, etc.

For example, consider some statistics, allowing to more fully judge the most difficult and easiest questions for students of natural sciences (Tab. 1). We have chosen the students of natural sciences to be analyzed for a more objective analysis. The number of the students significantly exceeds the number of participants in other profiles.

Tab. 1. The statistical performance of the test (natural profile)

According to **facility index** meaning the percentage of the students having given the right answers to the questions, the questions № 1, 17, 39 were the easiest ones for the students, while the questions № 7, 35 were the most difficult ones.

There are the examples:

**Question 39 (facility index 82.49%)**

SPEAKING

Match the number of the dialogue (1-3) with the picture (A-C) it illustrates.

**Question 35 (facility index 10.37%)**

**Choose the right answer.**

Kate played as if she ... (was not / is / was / were) a real actress.

Comparing these answers on the basis of the given criterion is of great use for building the right strategy of education.

**Standard deviation** characterizes the variation in the testees' estimations when answering a particular test question. For instance, the standard deviation of 24.67% in Question № 38 (word-building) approves the level of complexity of the task: Use the words given at the end of each line to form a word that fits the gap in the same line. Type in the formed (if necessary) words to the boxes on the right.

**Random guess score** is the mark which can be got while choosing an answer at random. Analyzing the answers we see that zero random guess score possess the answers of «embedded answers (Cloze)» type (Questions 38, 41).

The criteria of the **intended weight** (given by the test developer), the **effective weight** (actual fraction of the question in the final estimation) and **the discriminative efficiency** (comparison of the best and the worst answers) are also worth being studied. It should be also noted that the higher **discriminative efficiency** is, the more difficult the questions are. This criterion can gain value in the range from -100% to 100%. For example, 100% means that this question was correctly chosen by all strong students, and all weak ones chose wrong answer. In the case with Question №41 (Choose appropriate words for the dialogue. Type them in. Don't change them!), **the discriminative efficiency** constitutes 55.19% witnessing that this question is rather difficult even for strong students. It is also confirmed by such a distinct difference of **the intended** and **effective weight** – 1% to 2.28% correspondingly.

The value of the discriminative efficiency criterion close to 0 means that strong and weak students answered this question the same way. This can also denote that the question was to the same extent easy or difficult for these categories of testees. For instance, Question 34 (grammar task on multiple choice: We were watching our groupmates (make / being made / to be making) was one of such «difficult for both categories» questions. The criterion of the question of **random guess score** to be 11, 11% and a slight difference between **the intended** and **effective weight** – 3% to 2.09% correspondingly prove our suggestions – the question is both difficult for strong and weak students.

If the value is negative, then most likely the question contains an error, as it shows that the weak students gave answers better than strong ones. This criterion is an important statistical characteristic of the differentiating ability of the test tasks, which allow calculating the means of Moodle. Question 6 (below) has the **discriminative efficiency** of -14.47% though we can't say whether this question is incorrect or easy. Due to its difference of the intended and effective weight – 1% to 2.28% correspondingly, it is rather difficult.

Question 6. Listen to the text and choose the answer.

What is a «tea ritual»?

Select one:

- a. Strong ideas about the best way of making a cup of tea
- b. Making different kinds of food for tea
- c. Serving tea with milk
- d. Making tea in a pot and serving it

Looking at this question one can argue the complexity of the question, but first of all we should consider the fact that this is an audio text. Sometimes it is difficult for listeners to understand the essence.

It is considered that the most sufficient differentiating power is of ratio greater than or equal to 30%.

#### 4. CONCLUSION

The language Olympiad on the basis of the e-learning platform Moodle allows more precise assessment of the level of foreign language speech communication of university students.

The electronic resource must possess appropriate technical, methodological, pedagogic and didactic features, which enable a comprehensive assessment of the level of intercultural communicative competence development of university students at a certain stage of its formation.

It should be noted that for more accurate analysis it is very important to analyze the results of great number of participators.

The language Olympiad by means of ICT allows language teachers to optimize the content of teaching a foreign language in high school. No doubt, it will be positively reflected on the quality of education of the University as a whole.

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