Artículo de investigación

Modern approaches to the assessment of massive open online courses and its implementation on the example of courses for the Russian language studying

Современные подходы к оценке массовых открытых онлайн-курсов и их реализация на примере курсов для изучения русского языка

Los enfoques modernos para la evaluación de los cursos en línea abiertos masivos y su implementación en el ejemplo de los cursos para el aprendizaje de la lengua rusa

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Аннотация

Авторы систематизировали современные подходы к оценке массовых открытых онлайн-курсов на основании официальных источников и публикаций в открытой печати. Были выделены наиболее значимые критерии оценки, на основании которых была сформирована собственная авторская методика. Она была использована для оценки и ранжирования массовых открытых онлайн

Abstract

The authors systematized modern approaches to assessing massive open online courses based on official sources and publications in the open press. The most significant evaluation criteria were identified. The own author's methodology was formed based on this criteria. The methodology was used to evaluate and rank the massive open online Russian language courses, which results are in this paper.

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Keywords: Massive open online course, assessment, criterion, ranking

курсов по русскому языку, результаты которой приведены в работе.

Ключевые слова: массовый открытый онлайн курс, оценка, критерий, ранжирование

Resumen

Los autores sistematizaron los enfoques modernos para evaluar los cursos en línea públicos masivos basados en Fuentes oficiales y publicaciones en la Prensa abierta. Se destacaron los criterios de evaluación más importantes, en virtud de los cuales se estableció su propia técnica de autor. Se ha utilizado para evaluar y clasificar los cursos en línea abiertos masivos en ruso, cuyos resultados se dan en el trabajo.

Palabras clave: Curso en línea abierto masivo, evaluación, criterio, clasificación.

Introduction

The relevance of research

The Russian education system, like global trends, has been embraced by the widespread dissemination of e-learning technologies, that used at the university, interuniversity, regional and corporate levels (Maltseva et al., 2018). Elearning begin to play an increasingly important role, and one of the most popular and widespread types of it today are massive open online courses (MOOC) (Zhu et al., 2018; Sunar et al., 2018). The growth of MOOC technology is a global trend in the development of an open educational space (Capuano and Caballe, 2015; El Khadiri et al., 2019).

MOOCs are an informal mechanism for acquiring knowledge, open up the possibility of obtaining an independently chosen volume in a certain field of knowledge in an orderly and organized manner on the basis of institutional educational organizations and are designed for the mass consumers (Internet users) (Starodubtsev, 2015; Economides and Perifanou, 2018).

The widespread use of e-learning technologies necessitates compliance with relevant international and national documents, standards and specifications in this area (Alturkistan et al., 2018; Spyropoulou et al., 2019). This circumstance is an important condition for ensuring the quality of e-learning, serves as the basis for the implementation of confirmation and certification procedures, and contributes to the creation of a unite educational space not only of Russian, but also of the world level (Idrissi Jouicha and Berrada, 2019; Chuah et al., 2019). In Russia, as in many countries of the world, there is an acute problem of trust to the results of e-learning, and issues related to quality assurance and warranty of quality of e-learning are increasingly coming to the fore (See, et al., 2018).

An important feature of educational services today is the active participation of the client in the process of their production and consumption. Therefore, the actual requirement for the organization of the educational process is the feedback from the consumer of the university services, i.e. the student (Malinin, 2014). Feedback, according to European quality assessment programs, refers to the necessary procedures for managing the quality of education. Russian universities begin to make similar demands during the formation of internal quality assurance systems. Using feedback, the parameters of the educational process are monitored and management decisions are made to change them (Zacharis and Tsitouridou, 2019).

MOOCs assessment is made in order to have the opportunity to see the difference between different courses (Swan et al., 2015).

The goal-setting of the MOOCs assessment is primarily associated with their competitiveness, that has a particular relevance in the face of the outstripping growth in the number of open online courses on various topics (Staubitz et al., 2016).

Developers should be interested in creating highquality, affordable and commercially effective projects, which is associated with the achievement of certain characteristics and compliance with the selected criteria (Sanchez Acosta et al., 2014).

MOOCs assessment is appropriate for users who choose a particular product for development and want to focus on specific requests for various reasons (Deng, et al., 2019).

The purpose of this study is to systematize approaches to assessing MOOCs and to develop, on their basis, an author's methodology that includes the most significant and accessible criteria.

Materials and methods

The methodological basis of the study was systematization, theoretical analysis, generalization, expert assessment, ranking, comparative analysis.

Official documents and publications about MOOCs assessment issues were used as a source base, as well as online courses themselves as objects of an analytical study, which was made using the expert assessment method.

The several approaches to assessing the quality of e-learning were highlighted based on official sources and on the following standards and methods (Shalkina, 2017):

1. *ISO, IMS standards* - management standards defining common approaches to process management.

In 2005 for the first time, the International Organization for Standardization adopted a standard in the field of e-learning - standard 19796-1: 2005 "Information technology. Learning, education and training. Quality management, assurance and metrics. Part 1. General approach."

In Russia, this standard was adopted as State All-Union standard R 53625–2009 (2011). This standard defines the requirements including the creation of e-learning systems. They should be based on the detailed development of a functional model of processes, which is the basis for the subsequent development of the educational information environment and its configuration management.

The use of a reference structure for describing management processes in combination with reference quality criteria makes it possible to unify the quality assessment of these processes and electronic educational resources at various stages of the life cycle (Pozdneev et al., 2012).

In accordance with the ISO quality management concept modern Russian legislation proposes to determine the quality of education through the degree of its compliance with educational standards, requirements and (or) the needs of persons who interests educational activities are carried out, as well as through the degree of achievement of the planned learning outcomes (Chernyakhovskaya et al., 2014).

2. *Institutional systems* (for example, UNIQUE) - systems that define a set of formalized requirements for an educational organization during implementing e-learning processes.

UNIQUE is implemented by the European Foundation for Quality in e-Learning (EFQUEL - the leading organization in the field of quality in e-learning in Europe) and is intended for certification of e-learning at the institutional level, however, now within the framework of UNIQUE it is permissible the assessment of individual faculties (Belokopytov and Kondyurina, 2010).

The UNIQUE system uses indicators that apply to all components of the learning process:

- During assessing educational resources, the following are taken into account: the level of students' training, qualification characteristics of the teaching staff, the material and technical base of the educational institution;
- Assessment of the educational process includes: the quality of educational services, the degree of protection of intellectual property, training programs and advanced training of teaching staff and administrative staff;
- Assessment of the educational context includes the e-learning development strategy, the openness of the university and its innovation policy (Tikhomirova et al., 2015; Rubin and Soboleva, 2010).
- 3. *Software systems* (for example, eXcellence, ECB CHECK) - systems defining a set of formalized requirements for a specific e-learning program. The theoretical foundation of the eXcellence model in assessment procedures is the fundamental theory of

modern general pedagogy, pedagogical



qualimetry, pedagogical modeling, pedagogical technology, psychological, pedagogical and managerial theories (Matveeva, 2014). The eXcellence assessment model contains a set of quality criteria covering the institutional, pedagogical, technical, ethical and organizational aspects for elearning.

The ECB CHECK project provides for the certification of individual educational programs. Certificate evaluation criteria cover seven important areas (Soboleva, 2012):

- Information about the program / course and the organization of training;
- Requirements of the target group;
- Quality of content;
- Didactic design (how well the structure of training is developed);
- Media design (quality of the learning environment);
- Equipment and infrastructure;
- Assessment and internal audit.
- 4. *Technological standards* (IMS, ADL, etc.) are the most important aspect in the implementation and improvement of elearning technologies in the vocational education system.

By purpose, the technology standards can be divided into five categories (Kadeev, 2014):

- Components of training systems;
- Information about the student;
- Educational materials;
- Training;
- Comprehensive standards.

Recently, the systems that specialize in the quality management of e-learning exclusively have been successfully developed.

The main difference between the presented methods in comparison with the ISO / IEC standards is that the evaluation of the quality of e-learning is based on a set of criteria, and not the establishment of certain requirements for process management in the organization, that is, the main conclusion is made based on the experts opinion.

In addition to these approaches, the following assessment mechanisms are of interest:

• Tools for internal self-esteem (SEVAQ +)

SEVAQ + ((Self evaluation tool for quality in elearning)) is a tool created using ICT to conduct self-assessment of the quality in e-learning in the field of higher professional education. It provides both mandatory questions and the ability to create questions by the user. Evaluation results are available in real time and in various forms (Rubin and Soboleva, 2010).

• Approaches and techniques used in the systems of Massive open online courses (for example, QM).

The National Standard for Evaluation of Online Courses Quality matters (QM) is very popular in the USA. The main characteristics of QM are the evaluation of individual programs and courses, the involvement of experts from among the teaching staff, as well as the rating system for assessing the quality of educational online courses. The QM rating consists of 40 specific standards, which are grouped into 8 general standards, including the following (Quality Assessment for E-learning: a Benchmarking Approach: Third edition, 2016):

- General characteristics of the course;
- Training goals;
- Assessment and measurement;
- Resources and materials;
- Student involvement in the educational process;
- Course technologies;
- Student support;
- Availability.

Certification of an online course under the Quality Matters program can not only identify shortcomings and ways to eliminate them, but also provide the material necessary for the development of electronic courses and improving their quality.

Other programs (especially popular in the USA) include:

- Development of California State University of Chico - a section for online instructions (http://www.csuchico.edu/roi/the_rubri c.shtml);
- iNACOL developments standards and rubrics for measuring the quality of the course, training and programs (http://www.inacol.org/resources/resou rce-search/?resource_topics=16);
- Development of the Online Learning Consortium (formerly Sloan-C) - five

Encuentre este artículo en http://www.udla.edu.co/revistas/index.php/amazonia-investiga o www.amazoniainvestiga.info ISSN 2322- 6307 pillars of a quality framework for a quality online course (http://onlinelearningconsortium.org/ab out/quality-framework-five-pillars/).

iNACOL is the only quality / standards system listed above that is oriented both to online training and to an online course.

Particular attention should be given to the study of the quality of education in the Massive Open Online Courses system, made by EFQUEL in 2013 as part of the MOOC Quality Project. Launching the MOOC Quality project, EQUEL analysts recognized that the courses are very different from each other, and it makes no sense to talk about the quality of education within the MOOC framework as a whole. Therefore, the question arose of classifying Massive Online Courses (Malinin, 2014).

Separately, it should be noted the classification of approaches to assessing the quality of courses for various reasons (Andreev, 2015):

- 1. According to the type of assessment: pedagogical, technical and ergonomic, economic.
- 2. According to the processing methods of the obtained quantitative assessment of indicators of quality: manual, automated.
- 3. According to the subject of assessment: experts, students, teachers.

The basis of the mentioned approaches is the assessment procedure, based on a set of quality indicators.

For example, there are several ways to measure the quality of an online course, which comes down to interviewing course participants and not taking into account the assessment of key principles of educational design (Utku and Cetin Koroglu, 2018).

Merrill (2001) identified the following five main principles of learning:

- Problem-oriented approach training is successful if the student is involved in solving real problems;
- Activation learning is successful if the student's knowledge is used as the basis for new knowledge;
- Demonstration training is successful if new knowledge is shown to the student in practice, and not just told;

- Application training is successful if student apply new;
- 5) Integration training is successful if new knowledge is integrated into student's daily life.

These principles focus on learning activities.

Margaryan et al. (2015) added the following five principles that relate to learning resources and receiving feedback:

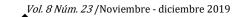
- Collective knowledge learning is successful when students contribute to the emergence of collective knowledge;
- Cooperation learning is successful when students collaborate with each other;
- Differentiation learning is successful when students are provided with different learning methods, depending on their needs;
- 4) Reliable resources;
- 5) Feedback.

A study conducted by Marganyan in 2013 on the assessment of MOOC showed a poor quality of educational design of MOOC. Hence, the further design of the MOOC, in his opinion, should be made taking into account the ten principles indicated above.

According to Conole's classification (http://mooc.efquel.org/a-new-classification-for-moocs-grainne-conole), during developing a quality assessment system specifically for MOOC, the following 12 criteria can be based on:

- Degree of openness;
- Mass character;
- Use of multimedia tools;
- Use of communication technologies;
- Degree of participants interaction;
- Type of individual training program;
- Level of quality assurance;
- Certification;
- Types of individual educational programs (from personality-oriented to mass-reproductive approach);
- Presence or absence of official status;
- Autonomy;
- Variety.

Another approach to assessing MOOC can be the conceptual model of a personalized MOOC (Starodubtsev, 2015) based on the axiological approach:





- Differentiation of the contingent according to individual "profiles";
- Level composition of content;
- Updating content with the participation of students;
- Formative (current) assessment with the participation of reviewers from different groups of the contingent;
- Pedagogical support at the request of the user;
- Integration of MOOC platforms with cloud social media services.

Gaytan (2005) highlighted the following provisions for evaluating the Internet course, based on the context-oriented approach:

- Designing regular, constant communication and feedback in relation to the student as a way to evaluate the course;
- Use of interactive interaction, which includes group projects, collaboration, discussions, etc.;
- Modification of traditional assessment tools, such as essays, discussions and projects, which require demonstration of acquired skills and ability to solve problems;
- Use of alternative types of assessment, such as assessment of the learning process, authentic assessment methods and the development of an electronic portfolio.

Swan et al. (2015) provides the following measurements for assessing MOOCs:

- Epistemology an assessment of the level of objectivism / constructivism in MOOCs. In accordance with the theory of objectivism, knowledge exists separately, while constructivists believe that knowledge is "constructed" in the minds of individuals;
- The teacher's role the degree of teacher's importance within the framework of the MOOC, the possibility of independent course mastering, the level of requirements rigidity, external or self-assessment, etc.;
- Empirical significance (focus of activity) determines the level of convergence the divergence of learning. In the first case, concentration is provided on the concrete correct answer; in the second case, a broad

interpretation of the answers is possible;

- Joint training the possibility of group work and communication in the process of mastering MOOCs;
- Accommodation of individual differences the degree of individualization of the course, adaptation for various user groups is determined;
- User's role the degree of user involvement in active learning or passive material's mastering;
- Structure the clarity of material structure is determined, including thematic areas, competent navigation, composition of the material;
- Content approach the degree of concretization of the presented course's material;
- Feedback the ability to establish feedback with the developers of the course and the speed of its provision;
- Activity / assessment the level of practical orientation of the course, the presence of specific cases, focus on real problems and events.

A wider set of criteria has an assessment of the quality of the electronic course (Orlovskaya et al., 2017):

- 1. General information about the course:
- a. Availability an introduction, a description of the course, information about the teacher;
- b. Compliance of curricula with existing standards;
- c. Clearly formulated goals and objectives of the course;
- d. Availability of complete guidelines for working with the course;
- e. Availability of a valid rating plan.
- 2. Organization and design of the course:
- a. Multimedia (an appropriate combination of text, graphic and video materials);
- b. Functionality (a complete set of various course tools that contribute to the successful completion of discipline modules);
- c. Convenience (visual representation of all the training modules of the electronic educational complex, simple and intuitive navigation).

- 3. The quality of modules' materials:
- a. Relevance of materials (all presented educational materials should correspond to the current moment, excluding the possibility of obtaining erroneous knowledge);
- b. Clarity of educational materials and assignments (information should be presented in the language spoken by the students, in compliance with all grammatical norms and rules);
- c. Various forms of material's presentation (lectures, videos, reference materials, etc.);
- d. Interaction with the student during the learning process (feedback);
- 4. Evaluation of the effectiveness of students learning:
- a. Availability of various assessment methods to measure material's mastering (surveys; tests; questionnaires; assignments; quiz and laboratory works);
- b. Fixing and saving test results and exercises (current sheet, with the ability to view and analyze mistakes and defects).

Voitovich (2014) shows indicators of effectiveness and quality of the functioning of elearning in the system of basic and additional education:

Content quality indicators of the electronic course

- 1. Authorship of the course.
- 2. Applied technologies of course development.
- 3. Models of courses and its pedagogical design.
- 4. The availability of course curriculum.
- 5. Course delivery technology.
- 6. Ease of access to courses and services.
- 7. Convenience of course navigation.
- 8. The availability of guidelines for working with course materials.
- 9. Used technologies of interaction.
- 10. Adaptability and personalization of the course

HR indicators

- 1. Teacher's qualification.
- 2. Proficiency of ICT.

- 3. Availability of continuing education programs in the field of ICT.
- 4. Availability of technical, pedagogical and resource support services.
- 5. Creating environment of learning from each other and motivation to use E-learning technologies.
- 6. Administrative support for research and practice seminars using different E-learning formats.

Indicators of the effectiveness of the information educational environment

- 1. Availability of business plans for the development of the E-learning system.
- 2. Quantitative and qualitative indicators of material and technical support of educational process.
- 3. The study of world and domestic experience in the field of e-learning.
- 4. Monitoring the weaknesses and strengths of E-learning

Didactic and technological indicators of E-learning

- 1. Availability of the educational process with the necessary software.
- 2. Availability of technical support services for students.
- 3. The degree of teachers accessibility.
- 4. Convenience of communication between teacher and student, student and student.
- 5. The development of a system for testing and monitoring students' knowledge.
- 6. Availability of an adaptation course on the formation of information competence of students.

A direct expert assessment of the courses of open education in the Russian language (2016) was proposed as part of the International Competition of open education courses in the Russian language and included the following criteria:

Name of the parameter and indicators (points: availability - 1, absence - 0):

- 1. Assessment of the course's passport
- 1.1. Availability of information about the author(s)
- 1.2. Availability of a course's brief description (annotation)
- 1.3. Designation of a course's target audience, an indication of Russian language proficiency level



- 1.4. Defining the objectives of course's mastering
- 1.5. Availability of course duration information
- 1.6. Forecasting the results of course's mastering
- 2. Assessment of the course's content
- 2.1 Compliance of course's content with state educational standards
- 2.2 The absence of unreliable, pseudoscientific facts, factual errors, immoral, unethical components, etc.
- 2.3 Compliance with the norms of the modern Russian language
- 2.4 Compliance with the age characteristics of students
- 2.5 Systematic and consistent material layout
- 3. Assessment of a course's methodological apparatus
- 3.1 Availability of Glossary
- 3.2 Dividing the course into modules (blocks, topics)
- 3.3 Availability of a description and / or content of the module (block, topic)
- 3.4 Availability of references for each topic of the block (module)
- 3.5 Availability of exercises for educational materials.
- 3.6 Availability of tests for educational materials
- 3.7 Testing knowledge (0-2 points):

undifferentiated - 1 point, differentiated - 2 point.

- 3.8 Availability of additional materials to the block (module, topic)
- 3.9 Availability of tasks to additional materials
- 3.10 Availability of final control
- 3.11 Availability of guidelines
- 4. Assessment of a course's interactive features
- 4.1 Point out mistakes and provide the correct options in test.
- 4.2 Mistakes analysis
- 4.3 The opportunity to re-test (re-exercise)
- 4.4 The opportunity to return to the question if you want to change the answer

- 4.5 Realization of possibilities of computer visualization of educational information (0-5 points):
- Presentations
- Video lectures
- Video materials with subtitles, with attached texts
- Static and dynamic images
- Availability of instructions and tips
- 5. Assessment of a course's information and technology characteristics
- 5.1 Convenience of navigation on course content (the possibility of parallel access to related sections)
- 5.2 Availability of search and reference subsystems
- 6. Assessment of technical capabilities
- 6.1 Correct functioning in different browsers
- 6.2 Availability and quality of protection against unauthorized actions
- 6.3 Accessibility and understandability of the interface (intuitive use of hints, inscriptions, reference materials, etc.)
- 6.4 Operability of all declared functions and capabilities of the resource
- 6.5 Ability to scale video file
- 6.6 Ability to control audiovisual materials (pauses, returns, repeats a fragment or a whole video sequence)
- 6.7 Availability of time control in the final control
- 6.8 Availability of additional technical capabilities (0-3 points):
- Calendar maintenance
- Alert / reminder system
- Keeping a diary / blog, etc.

The presented approaches to assessing the quality of e-learning can be adapted for use in Russia, including for assessing domestic e-learning courses.

In this case, it is necessary to take into account the specifics of the Russian education system and the requirements of national standards, harmonized with fundamental international standards (Pozdneev et al., 2012).

Modern Russian legislation, in accordance with the ISO quality management concept, proposes to determine the quality of education through the degree of its compliance with educational standards (the content of massive online courses must comply with the Federal State Educational Standard for Higher Education in order to fully replace academic disciplines with them in universities), the requirements and (or) needs of individuals, in the interests of which educational activities are carried out, as well as through the degree of achievement of the planned learning results (Chernyakhovskaya et al., 2014).

Thus, during designing modern MOOCs, it is necessary to take into account not only the needs of students of online courses, but also to develop a comprehensive method for assessing the effectiveness of this course, which allows to identify the level of knowledge acquired after completing the course.

Results

The author's methodology for MOOCs assessment which ensures that taken into account the most significant factors are was compiled based on the analysis of approaches to the assessment of MOOCs.

The key parameters that became the basis for assessing online courses in Russian are below. An expert method was used to evaluate Internet resources. Assessment was carried out by three experts from among the project executors, the final score for each criterion was determined as the arithmetic mean.

Content indicators

Quantitative parameters (1 point for each element):

- Number of presentations;
- Number of video lectures;
- Number of training materials (lectures, exercises);
- Number of test task blocks.

Qualitative parameters (1 point - availability; 0 points - absence):

- Availability of information about the author (authors);
- Availability of a course's brief description (annotation);
- Designation of a course's target audience, an indication of Russian language proficiency level;
- Defining the objectives of course's mastering;
- Availability of a glossary;
- Dividing the course into modules (blocks, topics);

- Availability of a description and / or content of the module (block, topic);
- Availability of references for each topic of the block (module);
- Point out mistakes and the provision of the correct options in test;
- The opportunity to re-test (re-exercise).

Emotional and aesthetic indicators (0-3 points)

- Level of emotional satisfaction with the course;
- Design (color scheme, style's integrity, the justification of the applied design elements and / or animation);
- Visibility (readability of texts on the proposed background, font quality);
- Multimedia (balance of screen's graphic and text content; quality of graphic objects and animations; convenience of viewing photos / videos).

Usability indicators (1 point - availability; 0 points - absence):

- Cross-browser compatibility;
- Mobile version of the site;
- Special features of the site for users with HIA;
- Clear interface;
- Availability and performance of the information retrieval system;
- Convenience of course structure;
- Ease of navigation.

Based on the proposed criteria, MOOCs in the Russian language were evaluated, selected as part of the study and providing open access to its content. In total, the sample contained 66 MOOCs located on various Internet platforms.

The assessment was made for each block, within which the ranking of online courses was carried out. 10 experts were involved for the assessment, among them 5 teachers of the Russian language, 5 MOOC users. The result was obtained as the arithmetic mean of expert's estimates.

In each group for the course the total score was calculated as the sum of the points of individual indicators and the courses were graded with ranks assignment. The overall rating is defined as the arithmetic mean of the ranks for each block of indicators. The generalized rating of the studied online courses is shown in the table (Table 1).



Course Name	Rating
Sketches about Siberia. Tomsk: Russian language course for foreigners	1
Russian dialects: a view from Siberia	2
Russian lessons	3
Save the native speech: to dialectologist-volunteer	4
"Speak Russian: principles of intercultural communication in one country"	5
Russian language. 10-11 grades	6
C2 IV Certification	7
I know the world in Russian	7
Express Russian language courses for foreigners. Level A1	9
Express Russian language courses for foreigners. Level A2	9
Preparation for the Uniform State exam in Russian	11
Fundamentals of teaching the Russian language of the indigenous peoples of Russia	12
Scientific texts - learning to write in Russian and English	13
Literate Russian language	14
Russian language: work on the bugs	15
Russian language as a tool for successful communication	16
Russian dialectology	17
Practical teaching of Russian as a second language	18
New directions in Russian dialectology	19
Syntax of modern Russian language	20
Understanding Russians: Contexts of Intercultural Communication	21
"Oriental patterns of the Russian language"	22
A1 Elementary level	23
Never write "never when". Online Course of Total Dictation	24
"Introductory-phonetic course of Russian as a foreign language for native Chinese speakers"	25
B1 I Certification	26
Correction Phonetic Course for native Chinese speakers	27
Old Slavonic	28
Total Dictation	29
Phonetics of the modern Russian language	30
About Russian in Russian: the basics of literate writing and speaking for the indigenous peoples of the Russian Federation	31
Russian language school with Smeshariki	31
A2 basic level	33
Russian language. 10th grade	33
Russian language. 5th grade	35
Russian language in life and career: practical tips	36
Preparation for the Uniform State exam in the Russian language (intensive course)	37
B2 II certification	38
C1 III Certification 39	39
Lexicology and lexicography of the Russian language	40
Russian language: easy start	41
Russian language from A to Z	41

Table 1. Final rating of online Russian language courses

Morphology of the modern Russian language	43
Russian language. 6th grade	43
Russian language. 7th grade	43
Russian language. 8th grade	43
Russian language. 9th grade	43
Russian language from "Goy Yesi" to "Lolkek"	48
Russian language and culture of speech	48
Russian language. 5th grade	50
Morphemic of the modern Russian language	51
Historical grammar of the Russian language	52
Elena Andreeva's Course	53
Spelling of prefixes in Russian	54
Education: do not listen and forget, but act and understand. Learning Russian and literature at school	55
Historical and linguistic commentary on the Russian language course	56
Russian language. Fundamentals of Psycho-Linguistics	57
Russian language in 5 th -9 th grades. Features of the organization of training in a limited language environment	57
Russian language in 5 th -9 th grades. Features of the organization of training in a limited language environment	57
Russian language in high school. Features of the organization of training in a limited language environment	57
Russian language for schoolchildren and applicants. Electronic dictations from experts in Russian	61
Features of the methodology of teaching the Russian language for indigenous peoples of Russia	62
Dialogue of cultures. A modern lesson of the Russian language as a native, step-native and foreign in the conditions of the Federal State Educational Standard	63
Learning Russian verbal communication. Part 1	64
Learning Russian verbal communication. Part 2	65
Russian is the language of education, science, business, art and high technology	66

The first courses in the ranking take their place mainly due to high ranks in qualitative and quantitative indicators, while the usability indicators in the top five ranks are the same (21). For example, "Sketches about Siberia. Tomsk: Russian language course for foreigners" took 3d place in the group of quantitative and qualitative indicators, and 7th place in the group of emotional and aesthetic indicators; "Russian dialects: a view from Siberia" took 17th place in quantitative indicators, but took the 1st place in qualitative and emotional and aesthetic indicators; "Russian lessons" took 8th place in the group of quantitative indicators, the 3d place in the qualitative indicators, and 11th place in the group of emotional and aesthetic indicators; "Save the native speech: to the dialectologist-volunteer" took the 1st place in the group of quantitative indicators, the place in qualitative indicators, the 19th place in the group of emotional and aesthetic indicators; "Speak Russian: principles of intercultural communication in one country"

took the 7^{th} place in the group of quantitative indicators, the 16^{th} place in the qualitative indicators, the 11^{th} place in the group of emotional and aesthetic indicators.

Courses that taking the last places in the ranking has very low ranks in at least one of the four groups. For example, "Features of the methodology of teaching the Russian language for indigenous peoples of Russia" took the 45th place in the group of quantitative indicators, the 53th place in the group of qualitative indicators, the 40^{th} place in the group of emotional and aesthetic indicators, the 21th place in usability indicators; "Dialogue of cultures. The modern lesson of the Russian language as native, nonnative and foreign under the conditions of the Federal State Educational Standard" took the 57th place in the group of quantitative indicators, the 62th place in the qualitative indicators, the 44th in the group of emotional and aesthetic indicators, although tool the 1st place in usability indicators;



"Learning Russian verbal communication. Part 1" took the 37th place in the group of quantitative indicators, the 3d took in the qualitative indicators, the 65th place in the group of emotional and aesthetic indicators, the 60th place "Learning Russian verbal in usability; communication. Part 2" took the 28th place in the group of quantitative indicators, the 16th place in the qualitative indicators, the 65th place in the group of emotional and aesthetic indicators, the 60th place in the usability; "Russian is the language of education, science, business, art and high technology" took the 65th place in the group of quantitative indicators, the 62th place in the qualitative indicators, the 44th place in the group of emotional and aesthetic indicators, the 21st place in usability.

Separately for groups, in quantitative indicators the average is 51.6, the average total points in qualitative indicators is 7.1 (out of 10 possible), in emotional and aesthetic ones - 7.0 (out of 12 possible), in usability - 3 (out of 7 possible). Thus, it can be seen that the indicators in the usability group are quite low for most online courses.

In the group of qualitative indicators, only two online courses got points in each of the indicators ("Russian dialects: a view from Siberia" and "New directions in Russian dialectology"). It should also be noted that a small number of courses has a glossary and a list of additional literature - 45% and 35%, respectively.

In emotional and aesthetic indicators, the number of MOOCs that got 0 points for at least one of the group indicators is 4 (6.1%), the number of MOOCs that got 3 points is 18 (27.3%), the number of MOOCs with 3 points for all four indicators is 6 (9.1% - "Russian dialects: a view from Siberia", "School of the Russian language with Smeshariki", "Express Russian language courses for foreigners. Level A1", "Express Russian language courses for foreigners. Level A2", "Russian language from "Goy Yesi" to "Lol Kek", "Russian Language (5th Grade)").

It should be noted that the indicators of the usability group have the lack of a convenient information retrieval system and special features for users with HIA on all MOOCs hosting sites. Only one third of MOOCs also has cross-browser compatibility and the availability of a mobile version of the site.

The table 2 summarizes the analysis of all 66 MOOCs.

Section	Indicator	Value
Quantitative parameters Qualitative parameters (1 point - availability; 0 points - absence) Emotional and aesthetic	availability of presentations	37
	availability video lectures	58
	availability of training materials (lectures, exercises)	52
	availability of test blocks	65
	availability of information about the author (authors)	62
	availability of a short description (annotation) of the course	65
	designation of the target audience of the course, an indication of the level of Russian language proficiency	57
	setting goals of course's mastering	61
	availability of glossary	29
	dividing the course into modules (blocks, topics)	56
	availability of a description and / or content of the module (block, topic)	34
	availability of references for each topic of the block (module)	23
	pointing out mistakes and providing the right options in testing	36
	the possibility of re-conducting the test (exercise)	47
	Average assessment of the level of emotional satisfaction with the course	1,69
	Average design score (color scheme, integrity of style, justification of applied design elements and / or animation)	1,69
	Average rating of visibility (readability of texts on the proposed background, font quality)	1,82

Table 2. The number of MOOCs according to various evaluation criteria

indicators ¹⁰¹ (0-3 points)	Average rating for multimedia (balance of graphic and textual content on the screen; quality of graphic objects and animations; easiness of viewing photos / videos)	1,66
	cross-browser compatibility	20
	site's mobile version	23
Usability (1 point	special site features for users with HIA	0
- availability; 0	interface clarity	52
points - absence)	availability and performance of the information retrieval system	0
	convenience course structure	58
	easiness of navigation	66

According to the results of the study, it should be noted the importance of the quality of materials and the method of its supply.

During assessing the knowledge gained by the listener, almost half of the MOOCs when checking test tasks do not show which answers were correct and where the listener made the mistakes; one third of the MOOCs makes it impossible to pass the test tasks again. Two thirds of MOOCs do not contain in its materials the references to additional literature which listeners could read to deepen their knowledge.

Particular attention should be paid to the MOOC sites, since the general impression of students from the online course may depend on its functionality.

Conclusion

The issue of increasing the effectiveness of MOOCs is multifaceted. It is directly related to its assessment, which is based on various approaches and a predetermined list of indicators. The scorecard is distinguished in accordance with the goal of the assessment and is associated with the influence of the following factors (Kurzaeva et al., 2016): axiological, usability, psychological, pedagogical, organizational, technical, normative and methodological, etc.

In accordance with the above factors, in the process of assessing MOOCs, the value of resources for users should be determined, its psychophysiological characteristics should be taken into account, the best teaching methods and techniques should be selected, the effectiveness of the information and educational environment for students should be ensured, the rational organization of training within the course should be ensured, the relevant technical characteristics and parameters, the content of training should meet the requirements of educational and professional standards.

Improving the effectiveness of MOOCs is possible only on the basis of taking into account all the identified aspects in a complex (based on interdisciplinary knowledge). At the same time, the pedagogical aspect remains leading and determines the formulation and updating of the tasks of finding solutions to the rest ones.

To ensure the effective development of language courses, among other things, it is required an assessment of the training content and its appropriateness for various target groups of users with different levels of language proficiency. In this case, it is possible to use several courses within the framework of parallel and sequential training, for which flexible individual educational trajectories for different users can be formed.

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¹⁰¹ Average values of indicators are given



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