This article is devoted to the study of electronic education terminological fund in the modern English language and its current state. The distribution of new English terms in the communication space of Kazakhstan and their intensive use is due to the processes of modernization and digitalization of education. In this work we consider 294 terms, analyzing their specific characteristics, classifying components according to the principle of productivity. The analysis of the studied terms made it possible to identify the dominant term in the group of synonyms denoting electronic education - e-learning. This article also discusses groups of terms that need to be clarified due to definitive variability and the lack of a generally accepted point of view on their meaning. The research shows that processes occurring in the sphere of electronic educational environment are directly reflected in the expansion of the terminology of electronic education. The current state of the terminology fund of electronic education is characterized by dynamism and the presence of a large number of terms that reflect related concepts. This article proposes that uncovered specifics and features for the groups of terms researched in this article are generally valid for electronic education terminological fund in the modern English language. The article predicts that further research and linguistic analyses of term groupings in the sphere of electronic education gives opportunity to elicit trends and developing tendencies of English terminological fund as a whole. A systematic study of e-learning terminology will reveal intrasystem correlations of terminological units. The abovementioned analyses results allow researchers to model possible directions and patterns of electronic education terminological fund development in the modern English language.

**Key words:** term, terminology, electronic education, communicative sphere, synonym, collocation.

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RESEARCH ON THE CURRENT STATE
OF ENGLISH ELECTRONIC EDUCATION TERMINOLOGICAL FUND
Introduction

At the present stage, problems of terminology are of a great interest among linguists, since the development of language means providing communication in a special field is inextricably linked with progress in science and technology. The need for an effective exchange of professional experience, the transfer and fixation of conceptual information entails the emergence of unions, associations and communities whose activities are aimed at improving and optimizing the processes of scientific communication. Currently, the research interests of terminology are being implemented in the following key areas: ensuring cooperation between organizations, scientific institutions and communities researching terminology, the development of terminological projects; standardization and harmonization of terminology, as well as the construction of terminological databases; development of theoretical and methodological principles for the study of the terminology of various subject areas; study of terminological issues of current interest.

The high rate of development of information and communication technologies inevitably requires constant learning, carried out in an electronic environment, which is reflected in the vocabulary, in particular, in terminology. The current state of the terminological fund, which conceptualizes e-learning, is characterized by the development of a transformational process, as a result of which new ones replace the existing terms. Researchers include electronic learning or e-learning, which appeared in the 90s. Currently, it is gaining increasing popularity due to a number of extra linguistic and linguistic
factors. The extra-linguistic factors include the active development of learning in the electronic environment, which is due to a number of economic and social processes, as well as the ubiquitous digitalization process that affects all areas of life, including education. The rapid development and spread of information technologies in the 21st century has contributed to the emergence of new teaching methods and a new segment in the education system – electronic learning. Among the linguistic factors that provide not only “survival”, but also the high frequency of this term, is its conciseness and transparency of semantics.

E-learning or e-learning is a new educational paradigm in which information technologies play a system-forming, integrating role, and opening up access to new learning technologies and information sources becomes crucial. The active involvement of various technologies in the new direction of education has an impact on terminology. In this situation, the term e-learning is gaining increasing popularity and is used to denote a wide range of issues related to the use of information technology in education.

We also share the common opinion of researchers that the term e-learning is dominant in the system of electronic education terms. However, a change in the paradigm of teaching, the emergence of new learning technologies, etc. led to the fact that the XXI century, a sufficiently large synonymous series of words appeared, denoting the process of acquiring knowledge through ICT. The electronic resource Power Thesaurus gives 294 words and phrases with a similar meaning forming a synonymous series of the term e-learning (Power Thesaurus https://www.powerthesaurus.org/e-learning). The presence of a large number of synonymous units among English e-learning terms indicates that the terminology of this communicative environment is an actively developing and growing part of the terminological system of the language (Shavluk V.B., 2010: 785). In this regard, it seems necessary to study the group of terms united by synonymous relations found in the sphere of their functioning in order to form an idea of the current state of the e-learning terminological fund in the English language.

**Experiment**

The choice of a group of terms as an object of study is related to electronic learning due to the frequency of its use in comparison with all the terms of the system in question, which gives researchers the basis to consider it the dominant terminology of electronic education in modern English; secondly, the intensity of the spread of the term e-learning, according to the results of the google.com search system (56500000 references in November 2005; 104000000 references in November 2009; 2870000000 in July 2019), that indicates the stable dynamics of the increase in the number of indexed links to the term e-learning, and, consequently, the progressive consolidation of this term in the professional environment; thirdly, the term e-learning introduced by UNESCO in scientific use, however, despite the fact that the term is generally recognized and, moreover, widely popular, there is no unity of views on how to define it.

The subject of research in this paper are the structural-semantic features that characterize the studied group of terms and, as a consequence, the current state of the e-education terminological fund in modern English.

This study is based on the results of research of such linguists as Lotte, D.S. (1961), Reformatsky A.A. (1961), Leychik V.M. 1986, Kobrin R.Yu. (1987); Sager J.C. (1990), Grinev C.V. (1993), Tatarinov V.A. (1996), Tabanakova V.D. (1999), Lemos A.V. (2000), Tuzukova V.I. (2002), Kageura K. (2002), Golovin B.N. (2003), Averbukh K.Ya. (2004), etc.

In this article, the following methods are used to determine the features of the group of terms and characteristics inherent in the e-education terminological fund in modern English: a method for reviewing lexicographic sources, to summarize the results of research on topics of interest to us and to reveal problems for further linguistic analysis; the method of critical analysis and synthesis of theoretical literature on the topic under study, in order to determine the direction of research and its theoretical base; descriptive-analytical method, which includes the observation and classification of language material, identifying features characteristic of the current state of the e-learning terminology fund in modern English.

It seems to us helpful to initially resolve the issue of key concepts that we will operate in this paper, as well as the main provisions and principles that formed the basis of the study. Sharing the position of researchers seeking to overthrow the “idealized” idea of the term, we proceed from the position that “linguistic objects (lexemes) defined as linguistic expressions of concepts which are typically used within a particular knowledge domain and by particular members of the linguistic community, lexical unit consisting of one or more than one word which represents a concept inside a domain” (Kageura K., 2002: 9).
As it is well-known a term is the linguistic representation of the concepts in a particular subject field. On the other hand, according to Sager, words function in general reference over a variety of codes (Sager J.C., 1997: 41). If we look at to how terms define concepts there are three dimensions: cognitive (form to conceptual content), linguistic (representations of concept in language) communicative (use of terminology) (Sager J.C., 1990).

Speaking about educational terms we can’t miss talking about educational neologisms as there is a great majority of new terms appearing every day and understanding its notion is necessary for us. Peter Newmark defines neologisms as “newly come lexical or existing units that acquire a new sense” (Newmark P., 1988: 140). Following Valeontis K., Mantzari E. we agree that Conception and introduction of a new concept into a subject field unavoidably involves its designation with a new term. Nonetheless, not every new term used in a language to designate a new concept can be considered a neologism (Valeontis K., Mantzari E., 2006).

The number of components that make up the term phrases in the field of e-learning is decisive in assigning them to a particular group. Analysis of terminological phrases allowed us to distinguish the following structural types: two-component, three-component, four-component and five-component.

The initial review and analysis of a list of term phrases extracted from the electronic resource Power Thesaurus showed that the most widely represented group of terms consists of two components. We have fixed 158 two-component terms-phrases (53.7% of the total number of studied terminological units). Of the 294 terms, 82 combinations of terms are three-component, which is 27.9% of the total. Further, 51 combinations of terms are four-component, which is 17.38% of the total, and the least common form of combinations of terms in this particular glossary is five-component combinations of terms – 3 out of 294 which equals 1.02%. The described data is presented in the diagram below.

The analysis of the group of terms according to the components allows the following subgroups to be distinguished: the components synonymous with the term “learning”, they are such terms as: education, teaching, tuition, tutoring, lecturing, training, coaching, schooling, study, testing, course, lesson, class, instruction, guidance etc. – 19 terms in total; components synonymous with the term “electronic”, for example: computer aided, technology assisted, cyber, online, connected, distant, interactive, multimedia, ICT based, internet mediated, networked, digital, open, remote, streamed, synchronous, uploaded, virtual, web, mobile, 3d etc. – a total of 26 terms in this subgroup; as well as functional components that ensure the harmonization of term combinations. This subgroup includes the following terms: by – e.g. by the internet, by email; assisted – e.g. internet-assisted, computer-assisted learning; aided – e.g. technology-aided learning, computer-aided teaching; based – e.g. web-based learning, internet-based training; transmitted – e.g. computer-transmitted learning, computer-transmitted training; mediated – e.g. computer-mediated learning, computer-mediated teaching; long – e.g. long-distance learning, long-distance education; live – e.g. live-streamed lecture, live-streamed seminar; form – e.g. electronic form of learning, interactive form of teaching.
format – e.g. digital format of education, virtual format of learning; through e.g. learning through the internet, learning through web; means – e.g. learning by electronic means, teaching through electronic means; using – e.g. training using ICT, teaching using ICT; via – e.g. guidance via internet, instructing via internet etc. In general, this subgroup is represented by 14 components.

The next result of the classification of the glossary of English e-education terms similar in meaning to the dominant e-learning was the ability to identify the most productive components in each subgroup. Thus, among the terms synonymous with the term “learning”, the component «teaching» is considered to be the most productive, e.g.: electronic-teaching, computer-assisted teaching, CBT (computer based teaching), technology-aided teaching, internet based teaching, multimedia teaching, online teaching, streamed teaching, synchronous teaching, digital teaching, virtual teaching / v-teaching, mobile teaching / m-teaching, r-teaching, e-teaching etc., only 34 combinations of terms.

The next in terms of productivity was “training”, e.g.: computer-assisted training, computer-aided training, electronic training / e-training, cyber training, distant training, interactive training, multimedia training, networked training, online training, open-accessed training, remote training, synchronous training, digital training, virtual training, web-based training (WBT) etc. As a result, there are 24 terms with the component “training” in the glossary we are studying.

Next, with a total of 22 combinations of the term, follows the component “education”, e.g.: electronic education / e-education, computer-aided education, continuous education, cyber education, distance education, distant education, interactive education, internet-based education, networked education, online education, remote education, synchronous education, digital education, virtual education / v-education, web-based education, mobile education / m-education, r-education etc.

The least productive components in the analyzed subgroup of English terms similar in meaning to the term “learning” are: “testing” – two term combinations in the glossary, namely – online testing, electronic testing / e-testing; furthermore there is term “seminar” – three combinations using this component: online seminar, live-streamed seminar, electronic seminar; and the term “school” – seven combinations of terms: cyber school, distance school, internet school, networked school, online school, digital school, virtual school / v-school. The diagram below presents data on the 19 components identified in the first subgroup of terms with the meaning of the synonymous term “learning”.

Following to the next subgroup – the terms are synonymous with the component “electronic”. The term “computer” has become the most productive component in this subgroup, 34 combinations of terms with this component are highlighted. As an example, we give the following combinations of terms: CBL
(computer based learning), CBT (computer based teaching), computer-assisted training, computer-mediated lecturing, computer-aided teaching, education via computer, guidance using computer, computer-assisted instructing etc. Further in the classification there is term “virtual” or its abbreviated form “v”. A total of 22 combinations with the given component in the analyzed our glossary, for example: online learning, online teaching, online tuition, online tutoring, online education, online lecturing, online training, online coaching, online schooling, online testing, online study, online class, online course, online lesson, online seminar, online guidance, online instructing etc.

The next position on the principle of productivity is the term “web”. Analysis of the glossary under study allowed us to identify 20 combinations of terms with this component, including: web-based learning, web-based teaching, web-based tuition, web-based tutoring, web-based education, web-based lecturing, web-based training, web-based schooling, web-based study, web course, web class, web-based guidance, web-based instructions, web seminar- webinar etc. Next, you need to select components with the lowest productivity of the formation of combinations of terms similar in
meaning to the term “electronic”. The components “blended”, “connected”, “continuous”, “distant”, “r” form one combination at a time. It is important to illustrate these combinations of terms: blended learning, connected learning, continuous learning, distant learning, r-learning. The full result of the analysis of the productivity of the components of the second subgroup is given in the diagram below.

The third subgroup of components is conditionally designated “functional components”; this group includes both independent terms and functional parts of speech, for example, prepositions. Analysis of the studied group of terms showed that the most productive component of this subgroup is the term “based,” using this component, 37 combinations of terms are formed, such as: computer-based teaching, computer-based learning, computer-based instruction, computer-based guidance, technology-based learning, technology-based education, technology-based teaching, multimedia-based education, multimedia-based lesson, multimedia-based class, multimedia-based learning, multimedia-based teaching, web-based training, web-based class, web-based lesson, web-based course, web-based lecture, web-based seminar etc.

It is also important to note the least productive components in the classification of the third subgroup: “by” – two combinations of terms, namely learning by e-mail, learning by electronic means; “transmitted” – two combinations of terms such as computer-transmitted training, computer-transmitted learning; as well as the “live” component and two combinations of terms that it forms live-streamed lecturing, live-streamed seminar. The result of the analysis of the “functional components” subgroup is presented in the diagram below.

The overall results of the analysis of the productivity of components extracted from phrases synonymous with the term “e-learning” are presented in the diagram below.
Results and discussion

Along with the term e-learning, many words and phrases are used. All the presented terminological phrases denoting educational processes with the involvement of various kinds of technologies contain a common component, for example, “based”. This component denotes the dominant position of technology over the learning process. As the field of education develops in the electronic environment and technology improves, new terminological phrases emerge, in which the “based” component comes to be replaced by terms «assisted», «aided», «supported», «enhanced», «transmitted» etc. As a result, the following terms appeared: technology enhanced learning, technology enhanced instruction, technology enhanced training, technology assisted learning, computer aided learning, computer aided instruction, computer supported learning, computer supported instruction, computer supported training etc.

Replacing one component with another indicates the influence of extra-linguistic factors, namely, a reassessment of the value of technology in the learning process, which now plays a minor role as assistants and assistants.

The use of the term e-learning as opposed to terminological phrases containing the components “based”, “supported”, “assisted”, “enhanced” indicates, according to some researchers, the rethinking of the role of training systems in the educational process. Now they are regarded as secondary to the learning process itself. This is evidenced by a number of works, in particular the work of M. Desai, which is called “E-learning: Paradigm Shift in Education” (Desai M., 2008).

Nowadays, using the term e-learning, theorists and practitioners of education understand it as a new educational paradigm based on its own methodology. In confirmation of these words, we cite Ken Heins, in his e-book «701 eLearning Tips» states: «The «e» in e-learning stands for education – we too often forget that – it is not about bandwidth, servers and cables. It is about education – first and foremost» (Masie E., 2003: 4). Some researchers, in particular, K.K. Jane tend to believe that e-learning will entail the evolution of the entire training system: «The term E-learning has brought a new meaning to education. It has been touted as the next wave in the evolution of learning» (Jain J., 2003: 112).

Along with the term e-learning, modern English actively uses the terms active learning, lifelong learning, open learning, interactive learning, self-paced learning, which reflect the methodological views on the nature of learning in an electronic environment. Increasingly, the term blended learning is found in the field of educational terminology, reflecting the latest direction of e-learning – blended learning, which uses not only communication via computers, but also “live” communication between teachers and students. Traditionally, blended learning is defined as a combination of learning under the guidance of a teacher (instructor) and E-learning, or as a combination of traditional learning and distance learning.

Blended learning means applying different approaches to learning: a combination of computer-based training programs and other sources of information, such as television, radio, books, audio tapes, etc., group and individual work, a combination of distance learning with traditional. In other words, blended learning involves a combination of e-learning methods with the direct participation of the teacher in the educational process. Sometimes the term blended learning is used when describing such an organization of the educational process in which learning offline (using a computer not connected to a network) includes teacher assistance or other online services. (Blended learning in Encyclopedia http://Blended_learning.html).

The terms distance education, distance learning, distant education, distant learning also coexist, denoting in a single learning space in an electronic environment, their meaning is related to the term e-learning. The terminology of e-learning is characterized by the emergence of new terms. For example, the terms r-learning, v-learning, m-learning, x-learning and c-learning appear. Similar terms that have not yet had time to gain universal acceptance, we, following the VM Leychik, refer them to the number of “leading” or “predictive” (Leychik V.M., 2007: 256). Some terminologists, for example, O. MAKARAKHIN, refer them to the category of “author’s,” that is, to such terms that are created for the nomination of a new phenomenon. (Makarikhina O.A., 1987: 4).

Conclusion

The analyzed glossary of terms allowed us to identify the dominant term in the group of synonyms for e-learning. Proof of the fact that in modern English in the field of e-learning, along with the term e-learning, other terms coexist, denoting related concepts, can serve as the results of the analysis, which resulted in 294 terminological units selected.
Also, the conducted study allowed us to classify the selected combinations of terms into three subgroups of components: components synonymous with electronic, components synonymous with learning, functional components. The method of observation and quantitative characteristics revealed the most and least productive components. The analysis of the terms allows us to assume that the processes occurring in the electronic educational environment are directly reflected in the terminology.

We believe that the characteristics and features identified for the group of studied terms are also valid for the terminological fund of electronic education in modern English as a whole. We believe that further observation and linguistic analysis of groups of terms in the field of e-education will highlight trends and tendencies in the development of the terminological fund as a whole and predict possible changes.

The existing variety of terms in the field of e-education suggests that a new type of education is being formed, in which information technologies play a system-forming, integrating role, and opening up access to new learning technologies and information sources becomes crucial.

Mastering a scientific field means mastering its terminology, but the coexistence of terms that are often used to refer to the same concept and do not have a single definition in an electronic educational environment presents certain difficulties. We believe that a systematic study of e-learning terminology will reveal the system-wide correlations between terminological units.

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