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Distance Learning in Scientific and Professional Fields of Communication (Interdisciplinary Approach)

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ABSTRACT

Modern level of informational technologies development allows the authors of educational courses to decrease their dependence from technical specialists and to independently develop distance-learning courses and their separate online components, which require special methodical learning. The aim of present study is to develop a distance-learning course in linguistics with regard to the specifics of the course that uses modern informational technologies. Scientific and methodic significance of the study consists in the fact that the developed online course is an innovative representation of the results of methodic and scientific research work of teachers and students. Therefore, it expands their opportunities to participate in the university's innovative activity, along with the educational and research activities. Within the presented project we plan to transfer the communicative-activity paradigm of learning into practice of distance forms of organizing students' independent work and to model a new educational product (online component of the course) on the basis of these results with consequent integration in educational process.

KEYWORDS

E-learning, blended learning, distance learning, scientific and professional field of communication, information technologies, linguistics, interdisciplinary approach

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Introduction

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The paradigm of education IT development in Russian Federation was accepted in 1993 [6]. Over two decades have passed but the number of essential problems has seemingly increased. One of the main lessons, as stated in "The Structure of ICT-competence in teachers: UNESCO recommendations" document "became the society's awareness of the fact that IT development of education is a multi-aspect process, which affects the requirements towards teachers' competence, educational materials, ICT tools and motives of the routine work of teachers and students" [16]. The process of IT development, which is currently conducted in our country, as well as internationally [1], makes us see educational methods and techniques from a new angle. With the IT development process we can also define an equally significant process – Web-development of the society and Web-development of education, in particular. Due to the fact that one of the main goals of modern education is the development of students' abilities of self-education and creative use of the acquired knowledge, it is necessary to find such educational tools, which themselves would be able facilitate new knowledge acquisition after graduation. As A.L. Nazarenko writes, "when we talk about integrating ICT in learning, the first and the most vivid association is distance learning. Before this innovation there were computer educational programs, which, of course, still exist now and fulfill their goal to the fullest. But distance learning is the "delivery of education" to the student, change in the vector of movement in education (not towards one center – towards education, but from one center – from education – to everybody); together with its interactivity, which was unseen before, it was a new impressive object… Distance learning found its field where it does not have any competitors". [8]

Recently there is a specific interest towards the question of actualizing students' cognitive activity [7, 10, 9, 11, 12, 14, 15]. It can be explained by the fact that in the conditions of IT development there are qualitative changes in the organization of students' educational activity. The priority in learning goes to designing and developing a new expanded, ICT-saturated and versatile educational environment [2, 9]. A significant part of this environment is constructed by virtual educational environment, which develops and functions on the basis of computer technologies. Technical foundation of this environment is computer networks with well-developed infrastructure and social services, within which the subjects of educational activity are provided with an opportunity to "always be in the classroom", regardless of the present moment in time and location.

Informational-educational environment implies the following inter-related components as the main ones: educational resources, educational communication and educational interaction management [10, p. 150]. According to this approach, we will explore the problem of creating tools of distance support of teaching the "General linguistics and history of linguistic studies" and "Speech activity of the society" courses for master students in linguistics of the specialization in "Theory of mass communications and international public relations".

Methods of Developing Distance-Learning Course for The Master's Program (right: the)

We will further describe the characteristics of scientific and methodic bases of developing the online component of the master's program course, which was created within the project on distance learning with the goal of optimizing the teaching process of the linguistic cycle subjects in an economic university. The above mentioned project was developed in the Laboratory of theoretical and applied linguistics of Plekhanov RUE and was aimed at creating an online educational course for a master's program on the basis of achievements of linguistics, psychology of communication and informational-computer technologies of distance learning.

The aim of the project is to transform the taught course *"General linguistics and history of linguistic studies"* into a distance-learning one with the use of innovative educational technologies and to actualize it in the educational process of two universities - Plekhanov Russian University of Economics and Perm National Research Polytechnic University.

The course is aimed at creating an integral and dynamic system of knowledge about language as a phenomenon of the reality and culture. This system is viewed as an instrument of efficient professional activity of linguists in various fields. The developed paradigm and methodology of the distance-learning course and its validation in the teaching practice allows prospectively transferring other taught courses of the master's programs in the Linguistics field to the distance form; this, in turn, would create the predispositions for integrating Web learning.

Goals of the project:

1. Development of the paradigm and methods of distance profile-oriented disciplinary course based on the achievements of linguistics, theory of communication, informational technologies and methods of professional education.
2. Creation of the online course layout.
3. Development and actualization of the efficient models of visualizing study materials within the dynamic element of the course, including multimedia.
4. Development of a flexible model of managing students' knowledge based on the natural interconnection between static and dynamic elements of the course.
5. Development and actualization of the tools for controlling the acquisition of competencies within the dynamic element of the course.
6. Record of video lectures on the key topics of the lecture course.
7. Distribution of study materials of static element of the course in the electronic educational environment Campus (lecture notes, video lectures, practical lessons, textbook materials, glossary of the concepts, links to the open-source educational resources, current publications on the topic in the media).
8. Presentation and organization of study materials of the dynamic element of the course (electronic workbook with the tasks for training and self-evaluation, forums, blogs, Wiki pages).
9. Conduction of webinars on the main topic of the lecture course.
10. Tutor support of the course.

11. Conduction of survey and interviews of the students and teachers of the course and of external experts.

Validation of the pilot project in the educational process, evaluation of its efficiency and opportunities for its distribution, as well as popularization of the obtained results on the scientific events and in publications.

Implication of Information Technologies

Information technologies develop rapidly and spread into almost all fields of professional activity. Educational activity did not become an exception, but, on contrary, is very susceptible to using new technologies in organizing educational process and students' educational activity. E-learning, which is supposed to expand the access to educational services and high-quality educational materials, is supported on the national and international levels [13]. "There is a change of educational paradigm from the traditional educational model to e-learning and further to Smart-education. Consequently, the role of universities changes from the suppliers of knowledge to the creators of conditions for students to acquire new knowledge on their own. Therefore, a teacher becomes not a translator of complete knowledge but plays a role of navigator in the endless informational-knowledge space. In Smart-education a student independently acquires the necessary knowledge by using the potential of information society and intellectual technologies". [18] Along the development of information technologies the new forms of actualizing educational programs became possible, such as combined learning [17] and development of individual trajectories for students [3]. New types of educational events occurred due to wide distribution of ICT and Internet in the society, for example, webinars, virtual reality, online-seminars, gamification, mobile learning, smart-course, etc. ICT causes the changes in communications within academic environment; students go to the libraries less but access social media more [4]. Using ICT in education is several decades old and is not an innovation for the education process per se; however, it provides wide opportunities for innovative development of separate courses.

Using ICT for developing separate courses gets to a new level. Each teacher, researcher and student gains free access to wide range of information technologies and sources, including new social media, video-conferences services, electronic courses constructors, massive open online courses (MOOCs) and open educational resources. Multitude of the available tools and forms of e-learning allows actualizing innovative potential of teachers and students in the development of online courses and separate online-components. Therefore, each developed online course is an innovative representation of the results of methodical and scientific research work of teachers and students.

The technologies, which were used in the development of distance-learning course *"General linguistics and history of linguistic studies"* include:

mobile technologies, which allow actualizing new models of communication and cooperative work and which are not connected to massive computers. Mobile learning implies easy access to study materials, testing and participation in the communities;

cloud technologies, which allow both teachers and students not to overload the storage space of their devices by setting up and storing the educational

online components and, on the other hand, to have access to educational space from any device at any time;

social media, which usually include Web 2.0 services that allow establishing the interaction between students and the professional community within the educational process and expanding the informational space to the scale of the whole field [19, 5].

Development of The Course (right: the)

The developed course includes two elements: static and dynamic. Static element is represented by lecture notes, video lectures, practical lessons, textbook materials, glossary of the concepts, links to the open-source educational resources, current publications on the topic in the media. Dynamic element includes electronic workbook with the tasks for training and self-evaluation, forums, blogs, Wiki pages.

Topic content of the course is aimed at covering 12 parts:

1. General linguistics as an interdisciplinary field of humanitarian knowledge and its place in the system of scientific knowledge about the human.
2. Modern structure of knowledge about the language. Definition of language and its essence. System and structure in linguistics.
3. History of linguistic studies. Genesis of linguistic traditions. Development of the theory of language. Linguistics of the second half of the XX century.
4. Language and thinking. Psycholinguistics.
5. Phonology and intonation.
6. Grammar. Main grammatical traditions of the language world.
7. Lexicology.
8. Text and communication.
9. Language and society. Sociolinguistics.
10. Linguistic typology. The problem of linguistic universals.
11. Main methods of linguistics.
12. Language in the modern world.

Presented topics are called to solve the following tasks of learning this subject: introduction to the main theoretical approaches to general linguistics; review of the history of linguistics and history of linguistic studies; development of the knowledge about the main stages of linguistics development; development of knowledge about the main schools in linguistics; acquisition of knowledge about the specifics of the studied languages, their systems of values and norms, which define the rules of verbal and non-verbal behavior in the native speakers of these languages; development of the skill to analyze and adequately interpret language- and inter-language processes and results of interaction between representatives of various cultures and cultural groups (subcultures) in specific conditions of interaction.

Methodology and Methodic Novelty of The Presented Project (right: the)

Methodic novelty of the project consists in the development of methods of implying the distance-learning technologies during organization of students' interactive, project and practical activity.

Methodology of the projects consists in integrating static and dynamic elements of the course with the educational process, which is distributed in time and space. Novelty of the project is explained by the actualization of individual approach towards mastering the system of linguistic knowledge: in accordance with the course structure, a student (a teacher) chooses on his own a range of questions, which he considers to be most optimal and aimed at a) acquiring elemental knowledge of the subject; b) developing basic knowledge of the subject; c) developing broad linguistic view. Methodic novelty of the project is partner activity of teachers and master's students of two universities in the form of projects, forums, online discussions, webinars, scientific consults and cooperative publications.

While the previous basic course is related to creating a linguistic perspective in the master's students, the other basic educational course – *"Speech activity of the society"* – is aimed at developing master's students' sociolinguistic perspective, which defines robust and correct professional orientation in the problems of language and society interaction. The course summarizes knowledge about a language as a real and cultural phenomenon and integrates them into a single system, which has to act as a tool of further professional activity. It contains a flexible system of managing students' knowledge, which is actualized by the development of an online component for organizing students' independent work on the studied subject.

The developed courses are a range of study and methodic materials, which are specially presented as *the static element* of the course (printed version of the textbook) and *the dynamic element* of the course (online component) for organizing students' independent work in the distance form within virtual educational environment of the university.

We set the following goals, solving which would help reaching the main methodic goal of the project: 1) development and implementation of the efficient techniques of visualizing study materials in the dynamic element of the course; 2) creation of a flexible model of managing students' knowledge based on the natural inter-connection between static and dynamic elements of the course; 3) development of distance forms of organizing students' independent work; 4) creation and actualization of system for controlling the acquisition of study materials in the dynamic element of the course.

In order to reach the set goals we used the following research methods: systemic approach during the development of ideas about the phenomenon of virtual educational linguistic environment and during its design; theoretical analysis and synthesis in order to generalize literature references, educational electronic resources and instrumental means of developing distance-learning systems; survey and interviews of the students during revealing the priority directions of online course integration into the field of teaching master's program subjects; expert analytical evaluation of the quality of the created distance-learning course; observation of the students' speech activity process in real and virtual educational linguistic environment; experimental method in empirical-experimental learning, aimed at evaluating the efficiency of the developed model of the distance-learning master's course. Using the complex

scientific techniques allows providing such parameters of the project, as its innovative nature, robustness, viability and distribution of the results.

Methodic Organization of The Project's Study Materials (right: the)

Method organization of the project's study materials includes: the development of the course structure with the validation of interactive and innovative learning methods and the layout of the online component of the course, according to the competencies, which a student should get as a result of studying with the use of pedagogic design points; preparation of text materials, presentations and necessary graphic objects; building of the online component of the course and its upload to the electronic educational environment "Campus". Materials, which are presented in the virtual campus, include: presentation of the leading teacher on the main topics of the lecture course; fragments of video lectures, practical lessons for class- and independent work, tests for evaluating master's students' abilities and skills, reference materials for the course, links to the open-access educational resources, current publications on the topics in the media, etc. Virtual campus tools allow uploading presentations prepared by the students on their own, as well as students' cooperative creation and editing of text and graphic materials on the topic of educational tasks proposed by the teacher.

Therefore, **the anticipated scientific and practical result of the project** is the presentation of the online component of the course in the form of Web-site, which includes study materials in the form of presentations, electronic practical lessons, forums for discussing the course parts, teacher's blog for publishing current scientific information on the course topic and Wiki pages for organizing students' cooperative project activity.

Significance and Relevance of The Project (right: the)

Significance and relevance of the current project is defined by the innovative approach towards training the specialists in the field of theory of mass communications and international public relations with the use of informational-computer technologies advantages for organizing students' independent work. We plan to transfer communicative-activity paradigm of learning to the practice of distance forms of organizing students' independent work and to model a new educational product (online component of the course) with further integration in the educational process (with the master's program subjects "General linguistics" and "Speech activity of the society").

Learning these subjects is based on the model of combined learning, in which the class work (lectures and seminars) is combined with the independent work in the electronic environment (virtual campus). Students' fulfillment of independent problem-based and project tasks on the topic of the course in the campus develops such competencies, as ability to work with the main information-search and expert systems and systems of knowledge presentation; mastering modern techniques of gathering, storing and presentation of databases and knowledge in the intellectual systems of various aims with regard to the computer technologies' achievements.

Development of these competencies is provided by doing the tasks with various Internet-services (forum, work with blogs, electronic mass media – current periodic issues, television plots, special linguistic Web-sites, etc.) in the

campus. Students of the course learn to develop their own educational routes, to find the most optimal ways of solving a problem-based task, to work in a team by demonstrating initiative and creative potential (creativity), as well as leadership qualities. During the practical lessons in the class, by presenting their projects publicly from the name of the group (team); the students speak with electronic presentations, participate in discussions, thus demonstrating their activity and interest. These aspects of the course structure are especially significant and demanded in the field of specialists' training in the theory of mass communications and public relations.

Conclusion

In conclusion we would like to point out that the scientific and methodic significance of the project conducted by the Laboratory of theoretical and applied linguistics of Plekhanov RUE consists of developing the methods of using distance-learning technologies in organization of students' interactive, project and practical activity within the studied linguistic subjects. The development of interactive foundation of the course structure (interaction of its elements and online components) is provided by the system of the continuous hyperlinks in the structure of the course itself: lecture material → main (key) concepts of the course parts → tests → practical tasks → problem-based tasks and projects. This approach towards designing the content of distance-learning master's program course allows reaching the set goals of learning and providing the activation of students' cognitive activity with the efficient implementation of the didactic capabilities of electronic educational environment.

As the experience of university education in Russia and worldwide demonstrates, modern computer- and telecommunication technologies, together with the establishment of market relationships in education, created new models of a university. "It is such institutional forms, as the distance-education units in the traditional and open universities, consortiums of universities, tele-universities, virtual classes and virtual universities". [13] Both MESI and Plekhanov RUE can be considered as the universities of such innovative type. Such educational model is one of the high-priority ones in the scientific and professional fields, because it corresponds with modern technologies of transferring, processing, presentation and acquisition of educational information, considers the interests of students and teachers and fits well in the system of educational process management in a modern university.

Disclosure statement

No potential conflict of interest was reported by the authors.

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