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Distance Language Education

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Abstract

The article gives an insight into distant learning technologies in teaching the theory of English to future translators and interpreters. The introduction of Distant Learning Resources (DLR) has recently become crucial for higher educational institutions due to the increased interest of the undergraduates in e-learning and boost in the electronic device market. The empirical base for the research is the results of the pilot Distant Learning Resource project that has been recently launched at the Faculty of Translation Studies and World Cultural Heritage, Kazan Federal University, Russian Federation. The authors present their findings on introducing the Distant Learning Resources into various academic linguistic courses they teach at the University. These resources have been developed to facilitate teaching and learning English for academic purposes by making the course materials most available, the assessment – maximum objective, and the students' feedback on academic topics – more productive. The research data collected with the help of traditional scientific methods of observation, product analysis and questionnaire have allowed the authors to come to a number of conclusions. The most valuable of them is that thanks to the Distant Learning Resources students' academic performance as well as learning independence has been considerably enhanced. The authors highlight considerable advantages and minor drawbacks of introduction the DLR into the process of students' learning. Moreover, the authors' opinions are supported unreservedly by the results of the students' opinion survey on popularity and efficiency of DLR, as referred to in the article.

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1. Introduction

In Kazan Federal University distance learning has always been one of the important and necessary ways of teaching students new disciplines and sciences along with full time education. Today for many disciplines in the departments of translation and foreign languages in the University, a lot of distant electronic educational resources (DLR) of online and offline mode have been created and introduced. The Moodle system is the leading educational platform in KFU.

2. Literature Review: The Theory of Distance Learning and E-learning

The 2000s, with easy access to the Internet, are characterized by the rapid development and wide use of online technologies to deliver educational content. As a result, not only a number of distance learning universities have grown, but "traditional" universities began to explore online technologies (Miller, 2014) in various disciplines. In particular, e-learning tools and technologies extend distance language educators' awareness of the technical possibilities at their disposal for developing online distance learning resources (Rogerson-Revell, 2007).

In the history of modern distance learning and e-learning, not including the initial type of distance learning of correspondence or the further ones of radio and television, the following characteristics and approaches may be distinguished (according to the summary of the characteristics of distance learning education by P. Williams, D. Nicholas, B. Gunter, in their overview) (Williams, Nicholas & Gunter, 2004): distance education is imparted where the learner is physically separated from the teacher (Rumble, 1986); DLR are a planned and guided learning experience (Holmberg, 1986, 1989); distance education consists of a two-way structure distinct from traditional classroom instruction (Keegan, 1988); the higher level of independence or "learner control" (Holmberg, 1995) which is a feature of distance education.

Baynton (1992) developed a model to examine this concept in terms of independence, competence and support. It was also affected by competence (ability and skill), and support (both human and material) (McIsaac & Gunawardena, 1996). Another concept, that of "transactional distance", was advanced by Michael Moore (1990). Here, "distance" is determined by the amount of communication or interaction which occurs between a learner and an instructor, and the amount of structure which exists in the design of the course. Greater transactional distance occurs when a course has more structure and less communication (or interaction). A continuum of transactions might exist in this model, from less distant, where there is greater interaction and less structure, to more distant where there may be less interaction and more structure. There is, these days, the problem of conflating of distance learning with e-learning. It could be argued that e-learning provides such a high level of interaction that the "distance" is necessarily smaller (Williams, Nicholas & Gunter, 2004).

In the late 1990s and early 2000s, interest in e-learning, both scholarly and commercial, increased substantially. Studies of American students in virtual programs at both the elementary and secondary levels led researchers to tout benefits of e-learning, including its flexibility in geography and scheduling, its ability to address various learning styles, and its overall expansion of educational access to people in remote communities (Kellogg & Politoski, 2002; Cavenaugh, Gillan, Kromrey, Hess & Blomeyer, R. 2006). While some of these studies have been criticized for not following a "robust research" methodology (Barbour & Reeves, 2009), the general impression of, and evidence for e-learning as a paradigmatic shift in the field of education (Harasim 2000) remains intact. Indeed, according to a 2009 report on the state of online-based e-learning in U.S higher education (Allen & Seaman, 2010), over 4.6 million American students took at least one online course during the fall 2008 academic term – a 17 percent increase over the number of students reported in fall 2008 (Roemer, & DeCrease, 2010).

In Russia although IT technologies have been taught in schools since 1986, now the problem of disparities existing between rural and urban schools is very serious. Distance and e-learning initiatives came to the rescue, expanding and consolidating Russian students' access to computers and IT training. According to the study by Docebo (E-learning initiatives in Russia, 2014; Ten Key Facts on the E-Learning Market, 2014), after the initial boost provided by federal investments in the early 2000s, and a growing number of private initiatives in distance and e-learning, the country is now considered a mature market, presenting an industry growth rate of 16% and leading the development of distance and e-learning in Eastern Europe. Among the most popular platforms to support teaching and learning and increase engagement among Russian students are Moodle, Khan Academy and Coursera.

Today e-learning is considered to be one of the ways to implement distance learning, but distance learning does not have to involve e-learning. Also, when learning is distributed to mobile devices it may be also called M-learning. (Hjeltnes & Hansson, 2004). E-learning is defined as "the use of new multimedia technologies and the Internet to improve the quality of learning by facilitating access to resources and services as well as remote exchanges and collaborations" (Bringing knowledge within reach, 2005). The most essential features of modern definitions of e-learning lie in that they focus on interactive learning and communication through different instruments using the Internet. For example, "Distance learning is a type of education where students work on their own at home or in the office and communicate with faculty and other students via electronic mail, the WWW, electronic forums, videoconferencing and other forms of computer based communication" (Morgan, 2000). This definition shows that e-learning can be distanced education but the concept of distanced education can be much broader.

E-learning and DLR offer pedagogic, administrative and economic advantages: interactivity (instead of passive acquiring information), enhanced student-teacher and student-student communication, more individual time for students, individual flexible optimization of students' progress (Morgan, 2000); better monitoring of students and better administration of educational processes; more students can be involved into the learning process with fewer labour hours (Weller, 2004), re-use and modularization (Wiley, 2000).

3. Observations, Findings and Discussion

The system of DLR gives an opportunity to present the learning materials of different subjects: speech practice courses, professional background courses, theoretical disciplines, translation studies as well as international exams training courses.

3.1. Speech practice Courses

There is a series of courses meant for the organization of practical classes and independent work of students in Home Reading. The aspect of the course is called so because it is focused on reading comprehension and discussion of outstanding pieces of English and American Literature. The courses include the texts of short stories, biographies of authors, reading comprehension and discussion tasks, assignments for conversation practice, lists of vocabulary, materials for practical tasks, online vocabulary drills, topics for essays and plan of text interpretation including stylistic, lexical and syntactical aspects.

Once a week two speech practice hours are devoted to the thorough check-up of the students' performance in Distant Learning Resource in Home Reading. This amount of time is considered sufficient since twice as much time is given to the student's independent study of this aspect of the course.

The contents of the courses do not only correspond to the students' growing linguistic ability and aptitude but to their psychological development from adolescence to early youth. The students are offered to work at the following in this particular order: a selection of adapted short stories by O'Henry, followed by those of Agatha Christie for freshmen, coming to the short stories by F.S. Fitzgerald and later to a separate DLR which are based on the selected British and American Stories for sophomores, extended with O. Wilde's Stories and Fairytales as well as The Picture of Dorian Gray for juniors, finishing the course with a few world famous stories by O'Henry in the original. Thus throughout the four years former school leavers learn to read, comprehend, speak on the problems raised in the above mentioned works of literary art and generalize on the issues the humanity has to deal with far beyond the pieces of literature. In the DLR these learning goals are realized via reading comprehension and discussion tasks, essays and literary text interpretation tasks.

However, the aim the linguistics major is specified with a number of goals. Among them is improving students' language abilities in English in terms of reading, listening, writing and speaking. To meet this goal we provide adapted or later original texts (including those in audio version), preceded by the biography of the author. These are followed by specifically arranged vocabulary lists, on-line vocabulary drills, assignments for conversation practice, grammar reference and practice, further reading and discussion materials, on-line vocabulary tests (with immediate feedback) – all based on the vocabulary and topics found the texts.

3.2. Professional background courses

Speaking of the goals of the linguistic major we successfully meet with the help of DLR we should mention the necessity to improve students' professional competence in terms of background knowledge vital for a proficient translator and interpreter. These are numerous geographical, historical, political, and cultural events and personalities of the English-speaking countries whose names challenge any careful translation and interpretation.

So, we took pains to develop DLR in Country Studies of the UK and the US. Each week of the second freshman's semester the students are introduced to a new *Unit* of the course containing *the Guidelines*, lecture material with the Power Point slide-show, the glossary in detail, historical realia translated into Russian. Each Unit is provided with various *Further Reading and Discussion* materials linked to numerous paper-based references and on-line resources. They determine freshmen's better understanding of complicated linguistic and cultural peculiarities of historical development and contemporary life styles in the English-speaking countries.

Naturally, all these serve as a basis for preparation for the practice classes and seminars. The tasks and assessment procedure, including that of professor and peer assessment, are included in the Unit. The students are free to refer to any extra material they might find useful, but practice shows they are most likely to limit themselves to the insightful study of the materials provided in the Distance Resource pack. Here we should mention numerous exercises based on country-study lexical material – they allow students to revise the new concepts they have learned in the Unit and practice English speaking and writing skills. The latter are most of use while freshmen write an essay which is a part of every Unit of the course. The essays as well as continuous and final course tests are given in and assessed on-line.

3.3. The Theory of English courses

The theoretical courses have approximately the same structure and set of standard components as they have to meet the requirements. These include texts of lectures, slideshows, questions for checking the lecture materials acquisition, multiple choice and matching tests, guidelines for students, glossaries and lists of recommended literature and references. Some peculiar features of resources are predetermined by the specifics of subjects. For example, the course "Morphology, syntax and punctuation" has hyperlinks to word formation, key word transformation and open cloze tasks of the international exams format. There is a possibility to exchange opinions about different aspects of the subject. For instance, a topic discussed in this course is as follows: "What level of the English grammar knowledge do you have? Assess yourself according to the CEF scale (B1, B2, C1)".

The course "Terminology" includes the following tasks: "Compile a Vocabulary of technical and scientific terminology. It should contain 100 terminological units of one of the spheres of science, technology or other fields of human activity"; "Give brief characteristics of any professional language. Illustrate with examples"; "Give the plural of the following nouns, which are found in scientific prose. Find their Russian equivalents (e.g. agenda, analysis, antenna, etc.), etc.

The course "Sociolinguistics" consists of 10 units, each focusing on different aspects of language existence in society, like monolingualism and multilingualism, language shift, loss and death, language planning, gender and age studies, politeness theories and some others. Each unit of the DLR contains either a practical task or a test, which should be completed upon reading the lecture material. The practical tasks stimulate the students' independent and active approach to understanding different sociolinguistic phenomena. Some of them involve interviewing other people as well as analyzing the collected data. There are also links to the articles of some prominent Western sociolinguists which the students are to familiarize themselves with as well as to do the tasks based on that material. Among the prerequisites for the completion of the course there is also a report, which needs to be presented in written form and summarized orally at one of the seminars. By the end of the course the students are expected to be aware of the main tendencies in modern sociolinguistics, to be able to conduct a simple research and, if necessary, find more information that would build up the sociolinguistic knowledge in the community.

3.4. Translation and Interpretation professional courses

One of the courses of translation cycle is titled Translation of texts in the sphere of sports and tourism. The text material is arranged according to the module principle depending on the theme, genre and style. The resource has a set of exercises for learning the terminology of corresponding spheres and lexical tests. A range of recommended bilingual terminological dictionaries and lexicographic online resources with hyperlinks are presented. Texts for translation and lexical assignments are available for downloading. The translation of texts is done as homework in writing and checked at the practical classes. Lexical tests are done online and checked by the system automatically. Doing the set of terminological tasks increases students' knowledge of English in the sphere of sport and tourism, and enriches their vocabulary in these domains. The resource suggests both Russian and English texts, thus the skills of translation from English into Russian and from Russian into English are trained. The texts are borrowed from authentic resources and are neither shortened nor adapted. The texts should be renewed as often as possible. Some theoretical information applied when translating texts is presented. For example, students find it useful to revise how to translate geographical terms, culture-bound words, how to use articles with geographic names and miscellaneous proper names. The rules of translating newspapers and documents are presented and the peculiarities of translating terms are described.

3.5. International exams training courses

It is impossible to study the linguistic major in English without a prospect of immediate or soon-to-be practicing this global language abroad. Students and professors take it for granted that English is best improved in the English-speaking environment or at least in the one where the influence of the native language is eliminated. But whatever qualified job or academic practice abroad one might consider, a proof of English knowledge and skill is required. To meet this challenge we introduced a few International exams training courses for the fourth year students. The choice of the college year, though limiting the course availability to senior students only, is quite justified: firstly, the English language command is at best, and secondly, students' career prospect is better outlined.

The courses are called Preparation for CAE, IELTS (Academic), BEC and TOEFL respectively. They are provided with the extensive DLR. The latter are divided into parts (units) corresponding to the modules of the exams, that is Listening, Reading, Writing and Speaking. To meet the standard requirements they include all necessary components (lecture materials, guidelines for students, glossaries, etc.). These are meant to explain and control the acquisition of the structure of the exams and the main strategies to pass them successfully. They are followed by the profound exam practice activities which are supposed to be done independently by the students. No wonder, the time formally allocated for the students' individual work twice exceed that for in-class activity (namely, 56 and 28 hours). The final unit of each DLR includes a mock test in the exam it covers followed by the feedback from the professors and peers on the strong and weak points of the students and how the deficiencies could be compensated.

Obviously, exams of this level contribute to the professional growth of a specialist, and international recognition. The course "BEC Examination Techniques", for example, suggests theoretical supports of exam information describing the structure and content of suite of three exams in Business English: BEC Preliminary, BEC Vantage and BEC Higher. Four language skills are covered: Reading, Writing, Listening and Speaking. All the tasks are described so that the students get an idea about what the assignments consist of, what the purpose of the paper parts are, and what skills are tested; examination techniques are suggested. The resource contains direct references to the authorized web sites which are provided with sample tests.

4. Research Methodology

4.1. Participants

125 students, 115 females and 10 males, from ten groups of the first, second and third year of undergraduate course of Kazan (Volga Region) Federal University, Kazan, Russian Federation, were invited to participate in the

study. The students' major is Linguistics; their speciality is Translation and Interpretation Studies. All of the respondents study English as a second Language and two other European or Oriental languages. The average age was 20.23 years ranging from 18 to 21 years old. The participants varied greatly in terms of the length of their English learning experience. The mean years of learning experience was 11.55 with a standard deviation 4.07 from the mean

4.2. Instrument

The instrument used in this study was the survey, "a list of questions aimed at extracting specific data from a particular group of people". The students were asked to write the advantages and disadvantages of Distant Learning Resources for learners of foreign languages introduced into their academic courses. As with all open-ended questions, ours sought to explore the qualitative, in-depth aspects of a particular topic or issue. We meant to give the students the chance to respond in detail (Battey, 2015)

The data were analyzed via counting the amount of answers that go under a particular category. As the students were free to use any characteristic of the DLR they might find relevant the interviewers made a considerable effort to arrange the similar answers together and classify them into four main categories presented further.

5. Results

5.1. The overall students' opinions on DLR merits and drawbacks

The results of survey show that the main advantages and disadvantages of using the Distant Learning Resources could be arranged into the following categories (in brackets the number of answers is shown). The answers are produced in the descending order with the most frequent at the top and the rarest at the bottom of the table.

5.1.1. Technical and technological characteristics. These are characteristics of DLR which are related to the necessity to use gadgets, availability and reliability of the Internet connection, traffic costs etc. The results are presented in Table 1.

Advantages	Disadvantages
mobility and online mode (19)	technical inconveniences (56)
mobility and online mode (19)	not available without the Internet (19)
convenient interface (11)	causing problems for eyesight and health (11)
unique, innovative platform (5)	complicated interface and structure of the website (6)
extra practice in using the PC and the Internet (2)	difficulty perceiving information from the screen (2)
easily downloadable files (1)	cost of traffic (1)
	difficulty typing texts in a foreign language (1)
	some hyperlinks don't function (1)

Table 1 Technical and technological characteristics

5.1.2. Contents and structure. These refer to the improvements or imperfections of the DLR in terms of material they provide and the way they are arranged in the resources. The results are presented in Table 2.

Table	2	Contents	and	structure
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Advantages	Disadvantages
availability of theoretical materials, texts of lectures and glossaries (88)	time-consuming (36)
	time limitations (11)
possibility to better understand the theoretical basis and system of the course (16)	tasks and materials of classwork are repeated (7)
	useless tasks (8)

additional materials and tasks (15)	level of tasks is higher than of those done in class (6)	
completed tasks are always available (3)	not all courses are presented via DLR (5)	
various interesting tasks (2)	complicated wording of tasks (4)	
additional audio and video materials (2)	lack of information (glossaries, lectures, additional	
strict deadlines (1)	materials) (4)	
no necessity to write anything down (1)	nothing can substitute a live discussion with the professor (3)	
availability of a literary work for Reading (1)		
	demanding much time from teachers (1)	
	correct answers in tests are not shown (1)	
	privacy (1)	

5.1.3. Academic performance and learning independence. These answers helped the professors to determine how much the academic performance of individual students could be improved with the help of the DLR. Another important finding is how successfully ex-school leavers have moved away from teacher-pushed school learning style to learning independence required of the undergraduate student. The results are presented in Table 3.

Table 3 Academic performance and learning independence

Advantages	Disadvantages
possibility to revise the studied material independently (24)	increasing amount of homework (18)
possibility to keep in touch with lecturers out of class (11)	students become less responsible (2)
possibility to choose time for tasks completion (19)	no guarantee of proper knowledge acquisition (2)
help for preparation for the seminars, practical classes (5)	
productivity (3)	

5.1.4. Assessment and feedback from professors. Along with explanation and practice DLR contain a considerable amount of tasks meant to assess the students' acquisition of knowledge and skills granted in the course: seminar work, essays, continuous and final tests. They are supposed to be properly assessed with either immediate (in tests) or postponed feedback from the professor. No wonder, this category is to be paid special attention to by the undergraduates working for a degree. The results are presented in Table 4.

Table 4 Assessment and feedback from professors

Advantages	Disadvantages
convenient and objective character of assessment and self-	lack or delayed feedback (12)
assessment (19)	no opportunity to change the result of tests (8)
a chance to gain additional scores (17)	no contribution to the final assessment (5)
availability of tasks for final assessment (12)	additional scores (2)
an option to redo the test (1)	
less time for professors to check tasks (1)	
less stressful than during a test in class (1)	

6. Concluding Remarks

The results of the practical application and discussions indicated that the MOODLE platform gives proper opportunities to realize linguistic courses of different types: theoretical disciplines, speech practice courses, professional background courses, translation studies and courses meant for international exams training. Their aims and content predetermine their structure, forms of tasks, and instruments of information presentations (attached files,

pages, hyperlinks, etc.), and tasks formation (tests, essays, etc.). The academic progress gives evidence to state that the scores students get for DLR tasks completion generally coincide with or surpass the marks students get at practical classes and seminars, i.e. in the traditional forms of learning. This fact proves that adaptation to the system of distant learning may be quite natural and negative consequences, as poor progress, can easily be avoided.

The results of the survey show that the advantages and drawbacks of the system used for the courses realization include technical and technological aspects, structural and content-related factors, individual preferences of learning acquisition, types and ways of assessment and feedback from lecturers. This leads to the formulating of several strategies to meet the academic need and interests of students: indicating the place of DLR in the process of subject learning; including the DLR scores into the final assessment of students; using the resources during the practical classes. The aim of the DLR authors is to maintain their highly informative character and enrich the means of material revision as well as knowledge and skills assessment. It is suggested that teachers should reasonably combine independent and interactive learning styles.

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References

Allen, E. and Seaman, J. (2010). Learning on demand: online education in the United States, 2009. Babson Survey Research Group.

Barbour, M. K. and Reeves, T. C. (2009). The reality of virtual schools: a review of the literature. Computers & Education, 52, pp. 402-416.

Battey K. (2015) Survey Questions and Answer Types. COO, QuestionPro - http://www.questionpro.com/a/showArticle.do?articleID=survey-questions

Baynton, M. (1992), "Dimensions of control in distance education: a factor analysis", The American Journal of Distance Education, Vol. 6 No. 2, pp. 17-31.

Bringing knowledge within reach.(2005) – eEurope: eLearning, 2005, p. 5 - http://ec.europa.eu/information_society/doc/factsheets/005-e-Learning.pdf

Cavanaugh, C., Gillan, K. J., Kromrey, J., Hess, M., & Blomeyer, R. (2004). The effects of distance education on K-12 student outcomes: A meta-analysis. Naperville, IL: *Learning Point Associates*.

E-learning initiatives in Russia. Technology increases student engagement. – The Missing Link, 3/27/2014 –

http://missinglink.newfrontier.eu/en/blog/Pages/elearning-in-russia.aspx

Harasim, L. (2000). Shift happens: online education as a new paradigm in learning. Internet & Higher Education, 3, pp. 41-61.

Hjeltnes A., Hansson B. (2004) Cost Effectiveness and Cost Efficiency in E-learning. QUIS, TISIP Foundation.

Holmberg, B. (1986). Growth and Structure of Distance Education, Croom Helm, London.

Holmberg, B. (1989). Theory and Practice of Distance Education, Routledge, London.

Holmberg, B. (1995). Theory and Practice of Distance Education, 2nd ed., Routledge, London.

Keegan, D. (1986). The Foundations of Distance Education, 2nd ed., Routledge, London.

Keegan, D. (1988). "Problems in defining the field of distance education", The American Journal of Distance Education, Vol. 2 No. 2, pp. 4-11.

Kellogg, L., & Politoski, K. (2002). Virtual schools across America: Trends in K-12 online education. Los Angeles, CA: Peak Group Research Corporation.

Miller G. History of Distance Learning. (2014). Worldwidelearn, November 10, 2014. – http://www.worldwidelearn.com/education-articles/history-of-distance-learning.html

McIsaac, M.S. and Gunawardena, C.N. (1996), "Distance education", in Jonassen, D.H. (Ed.).

Handbook of Research for Educational Communications and Technology, 1st ed., Lawrence Erlbaum Associates, Mahwah, NJ, pp. 403-38.

Moore, M. (1990), "Introduction", in Moore, M. (Ed.), Background and Overview of Contemporary American Distance Education,

Contemporary Issues in American Distance Education, Pergamon Press, New York, NY, pp. i-vii.

Moodle - http://www.moodle.org

Morgan B. (2000). Is distance learning worth it? Helping to Determine the Cost of Online Courses.

Roemer R.Ch., DeCrease B. (2010). Understanding E-learning. Research and Scholarship. Literature Review. -

https://sites.google.com/a/uw.edu/e-learning/research-scholarship/literature-review-part-one

Rogerson-Revell P. (2007). Directions in e-learning tools and technologies and their relevance to online distance language education. – Open Learning: The Journal of Open, Distance and e-Learning. Volume 22, Issue 1, 2007, pp. 57-74.

Ten Key Facts on the E-Learning Market. (2014). Docebo, In E-learning Industry, 2014 – https://www.docebo.com/2014/03/17/ten-key-facts-on-the-e-learning-market/

Weller M. (2004). Learning Objects and the e-learning cost dilemma. - Open Learning. Nov, 2004. Vol 19, Issue 3.

Wiley. (2000). Connecting learning objects to Instructional Design Theory: A Definition, a Metaphor, a Taxonomy.

Williams P., Nicholas D., Gunter B. (2004). E-learning: what the literature tells us about distance education. An overview. – The Emerald Research Register, pp. 109-122.

Rumble, G. (1986), The Planning and Management of Distance Education, Croom Helm, London.