learning systems we demand that the sequence of catalytic systems in its behavior should be directed to the growth of effectiveness, to the development of abilities and skills, in particular.

## Conclusion

Using of the proposed technology helps to automate the learning process with the help of the adaptive system. In this system the automated controller should do the following in communication:

- 1. Hold a student's attention. This action is stimulating, as the widening of the range of problems in t increases the probability that a student will give a wrong answer in t. Besides this induces him/her to studying in order to get higher points at step t+1.
- 2. Adapt the subject language, which for the most part determines the successfulness of interaction.

In practice it is not always easy to separate one from the other; however, it is possible in case of clearly defined step-by-step learning process.

# **Bibliography**

[Mashbits, 1987] Mashbits Ye.l. Psychological grounds of the educational work management. – Kiev: Vyscha shkola, 1987. – 224p.

[Iziumova , 1997] Iziumova S.A. Individual memory and learning process // Transactions of SGU. Series \ "Psychology and Sociology of Education"\. – 1997. – Ed. 4. – P. 10 – 23.

[Fedoruk, 2005] Fedoruk P.I. The technology of creating learning module in the adaptive system of distance education and knowledge control // Mathematical Machines and Systems. – 2005. – Issue 3. – P. 155-165.

[Sirozha, 2002] Sirozha I.B. Quantum modules and methods of knowledge engineering in the problems of artificial intelligence // Artificial Intelligence. Scientific and Technical Journal. – Donetsk, 2002. – Issue 3. – P. 161-171.

[Gordon Pask, 1961] Gordon Pask. An Approach to Cybernetics. London: Hutchinson, 1961. – P. 128.

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# REMOTE DEVELOPMENT OF DISTANCE COURSE USING VIRTUAL LEARNING SPACE 'WEB-CLASS KHPI'

# Mykola Savchenko, Ganna Molodykh

Abstract: An approach to a specialized website creation – club of distance courses authors – on the basis of Virtual Learning Space "Web-Class KhPI" is implemented and suggested in the article.

ACM Classification Keywords: K3.1 Computer Uses in Education - Computer-assisted instruction, Distance Learning

#### Introduction

Nowadays, the majority of distance courses is developed using virtual learning spaces. At the same time the nature of author's work depends mostly on conceptual peculiarities of virtual spaces. If the space operates on basic learning materials as e-book, the work can be done on the author's personal stand-alone computer without any interaction with the learning space. Having some advantages this approach contains a number of considerable limitations which could appear while trying to make changes into the learning materials and the configuration online, to restrict access temporarily to some parts of the course. More problems appear when

organizing the learning process, based on setting rating credits to every learner, regulating access to the materials. These problems can successfully be solved in learning spaces which consider all distance course components as a dynamic structure, allowing the author to make changes into any component online. Such an approach gives a chance to develop the distance course and to control the learning process simultaneously that is a usual thing for teachers in Higher Schools, who have to correct their syllabus constantly, to implement new methodological techniques.

The teachers in our University can get acquainted with distance learning elements either visiting face-to-face lessons or participating in distance courses. Our experience shows that these lessons are not enough for teachers to design their distance courses of high quality. The typical workload for many teachers in Ukraine does not allow creating the course quickly and, consequently, makes impossible finishing this work, because many practical skills are lost as time goes by. The problem of time can hardly

be solved considering the existing workloads, thus, the solution should be found in supporting and developing practical skills in teacher's work with his/her distance course.

The possible solution can be found using Virtual Club Work organization for teachers or des

igners of new distance courses. What is seen here as a 'club' work? The most significant aspects of 'club' work are:

- individual schedule for every teacher;
- constant consultations with leading specialists in distance education;
- possibility to see the other teachers' works;
- objective evaluation of the performed work from the club tutors;
- gradual familiarity with the virtual environment peculiarities, mastering practical skills of work in a distance course as a Tutor;
- restricting access for strangers;
- opportunity for teachers to work from different geographical regions;
- opportunity for teachers to work with multi lingual and cultural peculiarities;
- having opened discussions on topical problems of Higher School.

Structurally the virtual club work can be presented in the form of interacting virtual learning spaces with a definite center - a place of work for all the project participants (See Fig.1). A virtual learning space for new courses is a place for individual work of every participant.

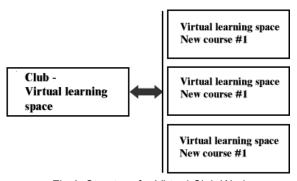


Fig.1. Structure for Virtual Club Work.

It is necessary to note that new courses can be developed by teachers from different educational establishments, who try to implement their conceptual approaches.

### **Analysis of Latest Research**

Websites designers often appeal to a club work which is understood not only as a user registration but also involving him/her into the active development process of the website or its separate components. As an example there is a website for National modern poetry (<a href="http://www.stihi.ru/">http://www.stihi.ru/</a>).

It is possible to place poems under any name on this website after the registration. After that poems get to the website rating and trying to reach more popularity and more readerships among the same authors-readers the author is included into an active process of literature communication and reviewing.

Another website (<a href="http://www.svistok.ru">http://www.svistok.ru</a>) is based on so-called large literature environment. This web resource contains many literature communities where authors, critics and readers can share their experience, communicate, present their books, announce their events, and make interesting discoveries in literature.

We think that the time has come to create community for authors of distance courses, directed to unite the distance courses authors and to activate the work in designing high-quality distance courses.

### Research Tasks

The main tasks of this research are to create "The Club for Authors' Distance Courses" and to study the basis for such website functioning, considering the peculiarities of new distance courses designing. During the development and implementation of the project we studied the questions:

- structure of the basic theoretical material for a website and a club;
- types of practical tasks and conditions of their performance;
- character and forms of tutor-author and author-author interaction;
- forms of community work among participants.

On the whole this research is directed to working out practical recommendations for effective functioning of such websites.

# **Learning Material Presentation**

As a main 'building stone' a Virtual Learning Space 'Web-Class KhPl' has been taken to implement this project.

This Learning Space uses a wide spectrum of learning services, modularity of its logical structure and file implementation. The system can be adapted to implement projects which are close to learning websites by idea content. It can serve as a basis for different interactive websites development. The experience of such work is presented in the distance course 'Creating interactive website on the basis of virtual learning space 'Web-Class KhPI' (<a href="http://dl.kpi.kharkov.ua/techn/nvs1/">http://dl.kpi.kharkov.ua/techn/nvs1/</a>) [Goroshko, E.I., Molodykh, A.S., Savchenko N.V., 2005]. The results of work in this course show the simplicity of learning how to study in 'Web-Class KhPI' and the possibility to transform it to create websites with different informational orientation.

At present time the project is on the implementation stage. The club website can be found on the National Technical University 'KhPl' website (See. Fig.2) <a href="http://dl.kpi.kharkov.ua/techn/nvs2/">http://dl.kpi.kharkov.ua/techn/nvs2/</a>

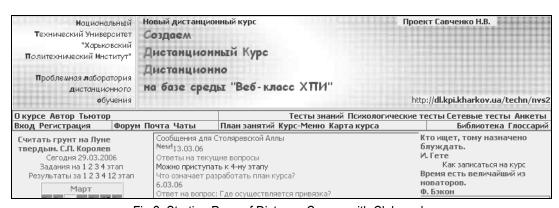


Fig.2. Starting Page of Distance Course with Club work.

Besides this website there are copies of this learning space to develop individual courses:

http://dl.kpi.kharkov.ua/techn/nvs2 01/ http://dl.kpi.kharkov.ua/techn/nvs2 02/ ....

The work under a distance course for every teacher is being built according to individual schedule using consistent performance of these stages:

| Stage | Title             | Contents  |
|-------|-------------------|---|
| 1     | Parameters        | Parameters setup.   |
| 2     | Planning          | Developing course plan, generating prototypes, connecting resources.  |
| 3     | Content           | Working with learning pages prototypes. Editing separate resources. HTML-code optimization.                                     |
| 4     | Testing           | Tests development: to test knowledge (X, D-tests), psychological tests (P-test), Net test (N-test). Cards preparation.          |
| 5     | Questioning       | Cards preparation. Developing prototypes. Results analysis. Patterns.   |
| 6     | Glossary          | Glossary resources preparation. Working with Glossary resource database. Key words. Vocabularies profiles. Dictionaries review. |
| 7     | Communication     | Planning Forums and Chats.  |
| 8     | Starting Page     | Starting Page management.   |
| 9     | Rating            | Development of separate tasks rating.   |
| 10    | Course management | Tutor's work in the course.   |
| 11    | Overall results   | Summation.  |

To reach the strategy of consistent moving through the listed stages the teacher is granted a rating which regulates access to theoretical materials. In a case of successful performing a stage Tutor increases the rating. The advantage of the suggested scheme of creating new courses is in the fact that spaces of a Club and a New Course are identical.



Fig.3. Example of the individual Distance Course.

The author does not only create the course but also gets practical skills of working in it. All the listed stages of practical work are performed online. The majority of resources are stored in the course databases. An access to these resources is regulated by the author. It raises the safety of course materials significantly.

Working on creating distance courses, the author arranges the time to perform every suggested stage independently. Considering the fact that the subject of a stage can require significant efforts to create new components for the whole course, it is required to perform only a part of the whole work to increase the rating.

The practice shows that none detailed instruction for the author can replace individual consultations with a specialist. The importance of the consultation is vital in many cases when trying to solve the authors' difficulties.

Working with course authors the dynamic structure of the course staring page is used actively. The replaced news, links to the personal messages optimize the authors' work significantly.

Standard tools are used in the course to organize the communication: Forum, Course Mail, Chat.

Tutor of the Club can view new courses on-the-fly, can make useful corrections and suggest alternative variants to solve arising problems. Now there are attempts to create a collection of terminological vocabularies.

To stimulate Club participants work under their courses we suggested and implemented rating system approach to evaluate the performed work. Rating credits show the author a comparative laboriousness of some task, allow distributing efforts uniformly while performing the current stage.

After the project the author is given a copy of a virtual learning space "Web-Class KhPI" with all the materials. The authors have all the rights to manage the materials at their discretion.

### Conclusions

A website of distance courses authors in a form of a Club is suggested and implemented. The present method allows solving a whole series of contradictions arising when creating new distance courses. The approach allows widening teachers' geography interested in practical aspects of distance learning. The project is on the stage of implementing now, but this information will certainly be interesting for a wide range of teachers in Higher Educational Establishments attempting to inform about themselves in Internet.

## **Bibliography**

- [Savchenko, N.V., 2005] Savchenko, N.V. O distantsionnom kurse 'Sozdanie interaktivnogo saita na baze spedy Web-Class KhPl' (About the distance course 'Creating interactive website using virtual space 'Web-Class KhPl'). International Scientific Practical Internet-Conference 'Computer Sciences in Science and Education', Russia, Voronezh, November, 2005 http://www.comp-techn.nm.ru/Section5/doc4.htm
- [Goroshko, E.I., Molodykh, A.S., Savchenko N.V., 2005] Goroshko, E.I., Molodykh, A.S., Savchenko N.V. Ispolzovanie virtualnoi uchebnoi sredy 'Web-Class KhPl' v kachestve interaktivnogo saita kafedry Mezhkulturnoi kommunicatsii I inostrannogo jazyka (Using Virtual Learning Space 'Web-Class KhPl' as an interactive website for the Cross-Cultural Communication and Foreign Languages Department). «Obrazovanie i virtualnost 2005», Proceedings of 9th International Conference of Ukrainian Association of Distance Education. Edited by V.A. Grebenyuk and V.V. Semenets. Kharkiv Yalta: UADO, 2005. pp.47-50.
- [Savchenko, M., Kukharenko, V., Molodykh, A., 2004] M. Savchenko, V. Kukharenko, A. Molodykh. Algorithms of Tutor's Actions While Conducting Distance Courses in Virtual Learning Environment "Web-Class KhPI". Proceedings of the Fourth International Conference Internet-Education-Science IES- 2004, October 5-9 Vinnytsia, vol. 1, pp. 205-208 (UNIVERSUM Vinnytsya, 2004) http://dl.kpi.kharkov.ua/techn/rle/ (See «Публикации...»).

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# E-SUPPORT FOR ENGLISH LANGUAGE COURSE TO ENHANCE UNIVERSITY STUDENTS' LEARNING

# Ganna Molodykh

Abstract: The peculiarities of English language teaching for students at higher educational establishment using some elements of distance learning, developed by the author, are described in this article. The results of students' questioning, received at the end of the experimental teaching, are suggested and analyzed. The conclusions are formulated and the further ways of teaching English with e-support are outlined.

**Keywords**: Distance Learning, methods of teaching foreign languages, course with e-support for teaching, new functions of virtual learning space, questionnaire.

ACM Classification Keywords: K3.1 Computer Uses in Education

# Topicality of teaching foreign languages using face-to-face lessons and e-support

Under the conditions of worldwide globalization and a tendency of Ukraine to be integrated into the world community, the knowledge of English at high level becomes one of the compulsory requirements for any specialist in any field of human activities. Teaching English at the Cross-Cultural Communication and Foreign