

UNIQUE FEATURES OF VIRTUAL EDUCATIONAL AMBIENCES

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Abstract

The article gives analysis of the notion "virtual reality", states advantages and defects of the virtual ambiances, describes unique features of the virtual educational ambiances and ways of their advancement.

Key words: *virtual ambience, unique, educational ambience, virtual educational ambience*

The unique of virtual educational ambiances is defined through realization principles of singularity, originality, uniqueness. For separation of the unique features of the educational virtual ambiances we will consider the types, categorizations, the main notions.

Latin meaning virtual has derived from Latin word *virtualis* i.e. possible. In S.A. Kuznetsova dictionary two meanings of the notion "virtual" are given 1) possible, which can or must be shown under determined condition; 2) conditional, appearing. It is considered that term "virtual reality" (virtual reality) in its modern interpretation at the end 80-s years of the XX century is brought into scientific use by D.Lanie (R.V. Lubkov).

F. Hemmit in the book "Virtual reality" (1993) has voiced the premises of shaping the virtual reality. The author sees them in synthetic possibilities of cinema. The prospects of the development of the virtual reality by F. Hemmit consist of the followings:

1. The functions of the computer capable can cardinal change; it depends on the improvement of software.
2. The virtual reality – an optimized, more "natural" for possibilities of a personal way to orientate in the world of electronic information, created on the base of friendly functional-interactive interface.
3. Operations with the components of the virtual reality are potentially identical to operations with real instruments and subjects.
4. Work in ambience of the virtual reality is accompanied with the effect of lightness, speed, carries definitely playing nature.
5. There is sensation of unity machines with user, displacement the last one into virtual world: influence of virtual objects is perceived by a person like "usual" realities.

According to the theory of the Virtual Reality - a computer virtual reality is understood as created by artificial facilities audio and visual (and acting upon other organs of the perception i.e. increasing sphere of its influence) semantic ambience, which is given or taken by subject of its influence as authentic or close to authentic.

R.V. Lubkov has enumerated the following advantages of the virtual ambiances:

- virtual ambiances allow to formalize the ways to create virtual images in a person that enables a teacher to work with more deep psychic reality in the manner of images of the second order;
- virtual ambiances vastly actuate scholastic-cognitive activity of students and their motivation;
- it is effectively possible to realize the communicative interaction for the subjects of the educational process by means of virtual ambiances, particularly in the cases, when the verbal description of an object is insufficient for identical transmission of the information about him;

- imitation of different situations (including imitation which is impossible in other ways: emergency during a flight, damage at atomic power station and others) for testing corresponding skills and abilities.

But, for every plus there is a minus. The using defect of the virtual ambiances T.E. Lihacheva sees in that that a user in general is completely excluded from reality, developing as an element of the world of computer illusions, for which there are no restrictions that leads to desocialization, dehumanization of human essence. In the author's opinion, these disadvantages can be compensated by using of completed to reality technology, allowing combine the real world and virtual, created by computer objects.

I.M. Osmolovskaya distinguishes the following using defects of the virtual ambiances in education:

- an invalidation of data. Very often sources do not correspond with reality. Nowadays the country is in the stage of formation of ideas and cultural valuables. And the recomprehension of the cultural heritage lasts until now.
- upbringing of aggression and hate. Abnormal amount of uncontrolled aggressive information spills on visitors from the Internet. And not always student can adequately and critically appreciate its negative influence.
- lack of the alive social contact. It can be so that a person after constant browsing the Internet becomes more hiding, closed and etc. This minus can lead to enormous social problem. With the mass appearance of the telephone and computer a man has forgotten the natural way to perceive the world of kinesthetic representative system. That, in its turn, comes to absence of the beautiful spiritual relations between people.

From I.M. Osmolovskaya point of view, for eliminating of the defects in electronic education it is necessary to pay attention to the following questions:

- the system of the all-embracing checking of the traffic training is necessary;
- the procedure of pupils' permission to the network is necessary;
- the system of teacher's responsibility for given information is necessary;
- alternative Internet system for information research is necessary: the Internet must serve as the additional source of information, but at all not main;
- national program of the educational universal rates and values is necessary.

Activity of the Internet-users in virtual space leads to the shaping of the certain groups of the ambiances, which differ from each other in their purpose and quality. It is difficult to systematize such a variety of the virtual ambiances. However it is convenient to separate them into constructive and destructive. We will give a short characteristic of these kinds.

The constructive virtual ambiances. This type of the virtual ambiances carries educational-developing nature. The ambiances are used solely as instrument for realization in real life, for example for acquisition of determined skills. The user sees in constructive ambience practical possibility, simplifying its activity in process of self-realization. Practical value of the ambience accumulates the possibility of the user in process of its use, contains qualitative excellent information diversified by validity.

Destructive virtual ambiances. The virtual ambiances often carry potential danger. The user gets under influence of the virtual ambience, being in which dependency is worked out, which is diagnosed by psychologists as "virtualone ". "Sinking into virtual reality, person, as a rule, falls into changed condition of the consciousness, in which contents of its unconscious has projected not on the external world, as, for example, for a fallen in love person, which sees the world through "rose-coloured glasses", but on created by programmers computer images. As a subject is involved into virtual plot, he draws the scanty computer pictures by his imagination, filling them with their significant larval

sense. The reflexive activity weakens gradually, and virtual life in this moment becomes for him more important, than life in external ("real") world.

Pursuing different purposes of the ambience, they execute different functions. According to their functions virtual ambiances are divided into: entertaining, developmental, communicative, and informative. The recreational virtual ambiances give the recreational facilities in the network. The most known of them are: "Fishki.net", "YouTube".

The developmental virtual ambiances are different cognitive-developmental portals and sites. In this ambience user gets the possibility for personal growing. The most popular is "Bibigon".

The communicative virtual ambiances are popular social networks, forums, blogs. The user gets the possibility without no trouble to find the circle of the contacts according to their interests. The examples are "Facebook", "Twitter", "VKontakte", "Odnoklassniki.ru", "My World@mail.ru".

The informative virtual ambiances – these are news portals of different kinds, such as their virtual analogue of the Mass Media. In the same way it can be different site of the organizations or private citizens carrying specialized information. Here are the main searching facilities of Runet. "Yandex", "Google", "Rambler", "Wikipedia", "Radio station "Echo of Moscow".

This categorization is conditional and general. Functionally every kind of the virtual ambience can have a lot in common with others under smaller gradation. So firstly the Internet-project "VKontakte" executes the communicative function, however carries elements of the entertaining project that is to say listening to music and watching films. The entertaining projects have the elements of the communicative virtual ambience, for example "YouTube". Internet projects, which possible refer to developmental virtual ambience does not have high popularity. However the first positions take entertaining and communicative Internet-projects. This trend is dominant and has systematic character.

According to the web-site Smart Education, the wide-ranging innovations of the leading companies in the field of developmental ambiances define the trends of the development in the near future. According to the experience of these companies the following types of the virtual ambiances are defined:

- Web-meetings. A good example is the decisions from "WebEx Meeting Center" and "Citrix Go To Meeting", including audio, joint work with desktop in all amounts, notes for premise materials into archive, change emerging, instruments for drawing and chat.
- Virtual classes. An example is "WebEx Training Center" and "Adobe Connect", allowing changing the extent of the class, including library content, tests, materials, oral tests and grading instruments.
- Virtual educational ambiances, for example, "Unisfair" or "Virtual Events365". These browser's platforms can be used both for external education and collaboration and for internal. These platforms give an easy access to content, subject experts and like-minded colleagues in constantly functioning ambience. The Training organizations use the similar instruments to connect formal and informal education, using at the same time virtual classes, network meetings, libraries of resources and social media.
- Virtual worlds, the most known is «The Second Life», in which many colleges and corporations expend the scenario of formal and informal education. Contrary to virtual events and ambience, virtual worlds are based on software; that is why it is necessary to download information. Herewith educational institutions, such as Massachusetts technological institute and University Notre-Dam have recognized the virtual classes "The Second Life" as economical decision for remote education.

Regional specific of Lipetsk virtual educational ambiances was formed on the base of original cultural-educational ambience of the region. Talking about specific quality of the local educational ambiances, including virtual, it is necessary to mention the historical-cultural aspect of the area. Cultural-educational ambience is a transmitter of rich, various and divergent information, acting upon

mind, feelings, emotions, faith of the individual, and providing possibility to alive knowledge. In such a meaning ambience appears in the manner of something like the laboratory of spiritual, social, professional personal experience, and algorithm of its studying synchronized by process of personality's creating. Hereinafter under cultural-educational ambience we will understand the collection of historical, cultural, regional and geographical components, actively developing at the expense of the own addition or of the borrowing from outside ambience, actively interacting with personality in this ambience and taking part in its direct creating.

E.P. Belozercev distinguishes static and dynamic features of cultural-educational ambience. Static feature, in his opinion, is reality, which happens to be considered with because of particularities of every region, area, city and etc, which is peculiar proportion of parts, merging of different components into the whole organic unity, in one word, harmony. Herewith region or city is certain wholeness, even relative temper of inconsistent elements, longing to correspondence of base and derived features, gender and peripheral notions. The dynamic features are a collection of educational purposes and actualization of its individualizing features, which make spiritual beginning of all converter tendencies.

Considering regional aspect of virtual educational websites it is necessary to mention the high schools of Lipetsk region.

Bunin Yelets State University, Yelets railway technical school - a branch of Moscow Institute of Engineer Transport, Yelets branch of Moscow Institute of Engineer Transport, Institute of law and economy, Lipetsk State Pedagogical University, Lipetsk State Technical University, Lipetsk Institute of Cooperation (the branch) of Belgorod University of Cooperation, Economy and Law (private), Lipetsk branch of autonomous educational non-commercial organization of high education "Institute of management, marketing and finance" (private), Lipetsk branch of Voronezh institute of Ministry of Internal Affairs of the Russian Federation, Lipetsk branch of the state educational institution of high education "Dobrolyubov Nizhegorodsky state linguistic university", Lipetsk branch of private educational institution "International institute of computer technologies" private, Lipetsk branch of the federal state budgetary educational institution of high education "Russian public academy of national economy and state service at the President of the Russian Federation", Lipetsk ecological-humanitarian institute (private), Lipetsk branch of the federal government educational institution of high education "Voronezh institute of the Federal service of the execution of the punishments", Branch of Voronezh economic-legal institute in Lipetsk (private), Branch of All-Russian financial-economic institute in Lipetsk, Branch of state educational institution of high education "Moscow state university of technology and control" in Lipetsk, Branch of Griboedov Institute of the international right and economy in Lipetsk (private) - these high educational institutions can become the base for shaping of virtual educational ambience.

In detail we will consider some of them. The criterion, we have chosen the high schools: Bunin Yelets State University, Lipetsk State Pedagogical University and Lipetsk State Technical University for the further consideration is a rating Webometrics, where they are enclosed. In his qualification work "Russian high schools and modern international requirements to institutions of high education (by the example of the analysis international rating)" A.N. Puzatyh gives the following characteristic of rating: "Rating Webometrics pays attention to exploratory activity of high schools, activity of publications of works on the official websites of the university, as well as maturity of network scientific communication of the researchers. For the rating the following criteria are used:

1. Size (S) - a number of the pages of the site, covered search systems Google, Yahoo, Live Search and Exalead (the weight 20%).
2. Visibility (V) - a number of the unique external references to pages of the university site through search systems Yahoo Search, Live Search and Exalead (the weight 50%).
3. Rich Files (R) - a number of the files on the website (the files of publications, results of the studies and scientific works). Number of four format files is counted: Adobe Acrobat (.pdf), Adobe Postscript (.ps), Microsoft Word (.doc), Microsoft PowerPoint (.ppt) (the weight 15%).

4. Scholar (Sc) - a number of the pages and references to the website of the high school, with use of specialized (for searching of the scientific works, representations of scientific community etc.) search machines Google Scholar (the weight 15%)."

About advantages and disadvantages of the rating the author says: "One of the defects of rating "Webometrics" is an insufficient interpreting of the rating. Practically, Iinternet-site of the high school becomes the single source of information about high school activity. In the opinion of A. Shamilov, the "number of pages on the website does not always speak for the fact that it is useful or interesting. On the website there are a lot of pages, but with the same photography of the school building. As a sensible person you will close this web-resource". Thereby, big amount of pages is not a factor for quality of a web-resource. But a number of the documents on the website is very useful, as presence of available and useful information is one of the main factors for a web-portal". The criteria, which Webometrics includes the high schools in its rating on we approach, since we are exactly interested in virtual look of the educational institution. Selected high schools were considered by us according to the following criteria: structure, contents and functions. The main aim of this analysis is a determination of both existing educational virtual ambiances and potentially possible. We will consider each high school separately.

Lipetsk State Technical University <http://www.stu.lipetsk.ru> has a standard structure of the website, with navigation to the sections that is to say the name of the section has the name according to information which it contains. The website of the technical university is possible to name the virtual ambience as its organization provides the publication with activity of different student organizations such as trade-union committee. Functions attract, by their means a user can use the Centre of the professional refresher training. It is a structured subdivision of the state educational institution of high education "Lipetsk State Technical University". The Centre is founded on 27 May 2009 on the base of the regional centre Federation Internet Education and faculty of the refresher course for specialists. Advancement of qualifications and refresher course for specialists are realized on base of the pacts, concluded by university with organ of executive authority, enterprises, organizations and institutions of all property categories, with private citizen coordinated with them according to the program and with taking into account demands of the customer, and with state requirements and standards.

The Centre of the professional refresher training is a base for organization and operation of the whole system of the additional university education. Distant education is made only by means of educational technologies. The compact disks are given during each session to the listeners with term electronic scholastic-methodical complex. The given complexes contain the kits of electronic textbooks on every discipline, tasks for performing, checking and term papers, methodical instructions for disciplines and other materials required for independent education. Besides, each listener is assigned password for entering informative educational ambience (Internet-portal of the distant education CPP), by means of it interaction between the listeners and teachers is realized. Thereby, organizers of the website create its specific virtual ambience. However a website has the informative function, on this base its structure is built. Activity of the centre is nevertheless informative and is not an educational virtual ambience, but on its base the system meeting our requirements can be formed.

Lipetsk State Pedagogical University <http://lspu.lipetsk.ru>, representation of this university in virtual space has the informative function. The structure consists of standard navigational set of the sections executing informative function. The news-wire publishes the last news of the university. The sections: student humor, student creative activity, amateur creative activity student and sports life inform the visitor about student life of the high school.

Bunin Yelets State University <http://www1.elsu.ru> in its structure has an essential difference in possibility for the creation of a personal account. By means of this account user becomes the member of the virtual university ambience. However the site has the informative function. It is necessary to point cooperation of the high school with Automatic information system of the assistance job placement for graduates, which realizes the decision of the following tasks:

- an automation of the procedures of the collection, processing, keeping and presentations of information on the labour - market with use of the modern telecommunicative facilities;

- an analysis of the supply and demand on the labour - market of different criteria;
- creation and development of protected information-telecommunication infrastructure, providing with the possibility of the data exchange.

Acme-centre conducts activity on making the system of portfolios among students and graduates. Portfolio is an individual, personal selected collection of different materials, which on the one hand represents the educational results, but on the other hand, contains information about the individual educational way i.e. process of the education, where the trainee can effectively analyse and plan his educational activity. Speaking about the possibilities of the using portfolio, it should be considered in system of the virtual educational ambience. In prospect of the development for virtual system on base of Yelets University website portfolio takes place as one of the features for author's system of the university. The possibility of interaction between an employer and user comes thanks to portfolio. The teacher in this system plays the tutor's role, objectively appreciating activity of a user. Making and promoting of the system on base of the university site is favorable ground for appearance of the virtual educational ambience in earlier specified categories.

The analysis of the regional aspect has shown that sites have basically informative purposes. There is the news-wire on the websites, where the latest events of the university life are reflected. Also they have a function to inform students. The leadership of the university places different information for students. Creation and development of the virtual educational ambience must be based on of the cultural-educational ambience of the high school; however the virtual look of the universities does not display the evident trends to the development of virtual ambience.

Nowadays there are a lot of the different strategies to promote the virtual educational ambience. Before to introduce the educational virtual ambience it is necessary to solve some fundamental tasks. It is necessary to define the target auditorium, which the ambience will be directed at. Define the primary tasks, which project will solve in process of its activity. Create a strategic concept, what field project will work in. Monitoring of existing offers plays an important role in this field, original marketing study. The central place in this row occupies shaping of the unique offers that is to say a concept of the offers in the services, which does not have analogues in this sphere. The virtual educational ambience must solve the existing topical problems. As it was spoken earlier, nowadays, the main problem of different social groups from students to specialists is a difficulty to get help in professional determination, as well as determination of the set for necessary skills and need for continuous education. These problems must be solved, since education was always shown as important forming for prestige of a state. Correct removal of problems is shown through solving of the given tasks.

The target auditorium of the virtual educational ambience is rather broad, that is its value. Determined social group in the individual order passes the diagnostics and gets the corresponding recommendations. Acmeological approach uses the individual method of the development, being in base of the virtual educational ambience, can promote the more detailed working out of the personality's problems, as well as ways of its decision. The universal methodological base of the virtual educational ambience contributes to the finding of the unique approach to solve the problems of different social groups, taking into account the individual particularities, making virtual educational ambience available for different users. It is necessary to create the different segments of the virtual educational ambiances since servicing of the whole system becomes technically complicated. The broad ranging of auditoriums by this project puts following tasks for us. Having its own, directed at different target auditorium segments, project will be able to avoid excessive spraying on broad auditorium in the future and will save competitiveness, producing necessary corrections of the separate segment, not touching general system. Each segment will be able to conduct its independent politics, creating competitiveness in its specific field. Such approach possesses the greater possibility both in promoting of the project and from technical point of view.

The virtual educational ambience in the wide sense allows solving the tasks to get determined skills and specific profession, in narrow sense the tasks of virtual ambience are problems of the user, addressed to service of the project. The unique of the virtual educational ambience of our region is

concluded in continuity of values, which are in the base of the corporative culture of the ambience, cultural-educational ambience of our region. These values must be expressed in brand concept of the project. The format of the resource will allow simplifying education, daily systematizing and directing the process of education. The methods of promoting the website into the Internet must be set into motion.

The main component of promoting is its internal optimization. We can say that this is the base for the whole process of site's promotion. At the first stage, we are laying the foundation which our external optimization will be based on. Internal optimization includes:

1. Writing unique titles for pages of the site - titles.
2. Filling in Meta tags of pages - keywords and description.
3. Revision of texts on specific pages - placing of key phrases.
4. Adding unique text on the specific pages of your website and not only.
5. Design of texts with tags - p, a, b, strong, li, etc.
6. Preparation for relinking between pages;
7. Closing from indexing doubled pages and pages which do not have a meaning;
8. Filling in the file robots.txt with the requirements of search engines;
9. Mapping the site if it is necessary.

Link building on the site is external optimization; equally important component of the technique of site promotion. If we are dealing with a competitive theme, links to your site from other sites will have importance. As one of the factors which Google (and other search engines) rank sites in issuing is number and quality of external links, as well as their term of affixation. External optimization includes:

1. Registration of the site in major site's directories and organizations;
2. Placing articles on resources with reference to the site being promoted;
3. Getting links from blogs to promoted site;
4. Purchase links in the exchanges articles.
5. Monitoring the positions of the site, indexing pages and user behavior.

During the whole promotion process - the monitoring of what is happening with the site and after analysis and the changes are set into the process of promotion. Principles of promotion and in most cases the techniques for many resources are rather universal too. It is important for individual virtual technologies 'Portfolio of achievements.'

It is recommended students to develop electronic or online portfolio. This format allows you to communicate on the Internet with possible employers and other stakeholders easily and effectively. These e-portfolios can be placed both on a personal website and on the University website. So, on University website there is a special section devoted to personal information about students for potential employers.

The procedure of filling in the "portfolio" is the following:

1. Portfolio of achievements" is completed by students in printed and electronic form, with attached certificates, diplomas, letters of gratitude (advice can be obtained from academic advisors) and transmitted to the head group and then to the Dean's office.
2. Dean checks the "portfolio" and recommends the list of students to be placed on the website, reports their academic advisors or the person responsible for the website of the faculty for placing them on the website.

We propose the following variant of the electronic portfolio.

1. Name of a student (photo).
2. Specialty (training), qualification.
3. Student's presentation (greeting).
4. Autobiography - the date, place of birth, parents, school, major achievements at school; additional education - music, art school, achievement in the system of additional education; dates of entering the Institute, University, place of work; personal qualities, their role in the implementation of the various life activities ; military duty, marital status, children.
5. My attitude to the profession in the sphere of implementation of professional knowledge, the author's system activities by famous people of the profession (my professional ideals), prospects the development of the profession, the development of approximal professions.
6. Achievements in the basic educational program. (Your marks at all stages of education, comments, favorite subjects, teachers, motives for learning, the main periods and stages of learning, changing views about their future profession, opinions of teachers and scientific advisers, heads of education, undergraduate and graduate practices, a list of practice and work places), participation in competitions, contests, various academic disciplines, professions. "Courses for choice and creative work" (list of additional courses, assessments, certificates, comments, acquired competencies, a list or a structured presentation about any kind of creative work, reviews about them, including in the media and so on).
7. Achievements in research activity. (Describes participation in research work, participation in the student scientific society, self-educational program, compilation and dissemination of professional knowledge, own methodological and didactic developments, the list of course theses and qualification works, publications, scientific correspondence, annotations to own work, reviews about works).
8. Achievements in the system of additional education (additional profession, its place in future professional realization).
9. Achievements in social activity (social activity; public orders; participation in social and political practice; public/public-political associations, organizations, a member of which you are/were; socio-cultural, socio-political forms, projects and programs implemented in this context; the predicted and actual effectiveness).
10. Professional "mission" of the future specialist: analysis of acquired competences, analysis of the author's system activity, product description of ASA (author's development (photo, collage, video, and others).), the proposed implementation, the attached experts' reviews.
11. Contacts: phone, e-mail.

The user can enjoy all the benefits of this system to resolve his problems. The psychological appeal of educational virtual system plays an important role. Maximum possible media technologies should be involved into the project.

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