

METHODOLOGY OF E-LEARNING INCULCATION

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Abstract

In the article is called the gap reasons between potential and real e-learning possibilities and it is indicate on the need to develop a methodology of its inculcation; is considered elements bundles of a system subsystems which are confirmed the some elementary structural junction of the three definite elements that universal logical functional dependence characterize which is called as “triads”. Structural model of these junctions is represented as a conventional isosceles triangle in the vertex of which is located the element, in essence balancing the internal contradictions of the other two; is shown the contradiction softening ways; the substantial components of the methodology of e-learning inculcation in the Republic of Kazakhstan are represented as a scheme and is given a brief description of the components shown in the scheme.

Keywords: E-learning, triads, structural model, substantial components of the methodology, inculcation of the e-learning in the Republic of Kazakhstan

Introduction

Tremendous progress in the electronic technique development provides good technical possibility for various didactic ideas realization. However, methodological aspects of e-learning lag behind from technical means development. The lag in methodological problems development and "low-tech" of existing psychological and pedagogical methods are one of principal gap reasons between potential and real e-learning possibilities (Solovov A.V., 2006). To e-learning possibility use need to develop a methodology of its inculcation.

Structural components of the methodology of e-learning inculcation

Traditional training is interpreted usually as a pupil’s cognitive activity management with the aim of forming by them the knowledge, skills and experience, of personal qualities development. Naturally, the learning environment with help which is realized the educational process is not taken

into consideration in this scheme. In the scheme shown in the article by A.V. Solovov (Solovov A.V., 2006), this environment is presented in the form of educational and methodical complex. As the author writes, the triad "Teacher - Training and methodical complex - Pupil" is considered and the inherent by pedagogical e-learning systems «feedback» concept peculiarity is shown.

However, something else is implying by "triads" in the article by Y.A.Nabi and G. K. Mendygaliyeva (Nabi Y.A., Mendygaliyeva G. K., 2006). There a system subsystems elements bundles were considered and follow supposition was confirmed: these elements form some elementary structural junction of the three definite elements which universal logical functional dependence characterize. Such logical structural bundles are called provisionally as "triads". Structural model of these junctions are represented as a conventional isosceles triangle in the vertex of which is located the element, in essence balancing the internal contradictions of the other two. Triad's pairs form the certain structural junctions in the form of rhombuses if the bases in which are located equal elements to connect.

The teaching subject – a teacher, the learning subject – a learner and the educational information environment make the basic triad of e-learning inculcation methodology components. The didactic possibilities of information communication technologies (ICT) are realized in this environment.

The contradiction softening caused by significant changes in the educational interaction between a teacher and a learner is realized in result of feedback not only between teacher and learner, but also between them and educational information environment based on ICT. The contradiction between leader role of a teacher and slave role of a learner is appeared in the result of this. In order to remove this contradiction the essence of training and information interaction in the e-learning inculcation condition it is necessary change, i.e. teacher's functions to transfer partially by a learner: learning outcomes control; organization of various activity forms at self-extraction and self-representation of knowledge; collect, processing, keeping, transference, circulate of information. Then structural junction in the rhombus form is formed.

However, e-learning inculcation methodology components structuring does not end on there. Consider other components.

The learner's role strengthening in the educational process evokes a contradiction between teacher and learning information environment, because the distrust to it in learning aims achieving by teachers. In order to remove this contradiction the scientific-pedagogical and methodological ensuring of the e-learning inculcation need to be developed. The new triad forms together with the learner a new rhombus in the result. However, the new triad appearance creates a contradiction between teacher and this

element, because he will have the additional work to the training functions. In order to remove this contradiction the methodological problems of teachers preparing for work in the e-learning inculcation conditions need to be developed. It is especially important that the teacher's role may be reduced to training content development with the advent of "mobile learning". Then a new link is appeared and the new triad is formed, it will consist for the elements: "the learning-information interaction essence", "learner" and "mobile learning peculiarity's identifying".

Permanent renovating and complicating of interactive learning means evoke an abnormally high interest by learner; he spends a lot of time on the computer. The contradiction between the educational process intensification necessity and the requirement of learner's mental and physical health arises. To remove this contradiction, the measures set on reducing of the negative consequences of information communication technologies means use in education it is necessary to substantiate scientifically. Educational products quality evaluation from the didactics and ergonomics position, as well as health-saving technologies is one measure for new contradiction removal. These technologies include the physiological and hygienic character measures described in special normative methodical documents. However, the potential of several sciences (medicine, sociology, law, etc.) it is necessary to unite on a methodological level with an aim to make the recommendations on the "computer dependence" destructing and young people from "virtual reality" separating.

Based on the foregoing, the substantial components of the methodology of e-learning inculcation in the Republic of Kazakhstan can be represented as a scheme in Fig.1.

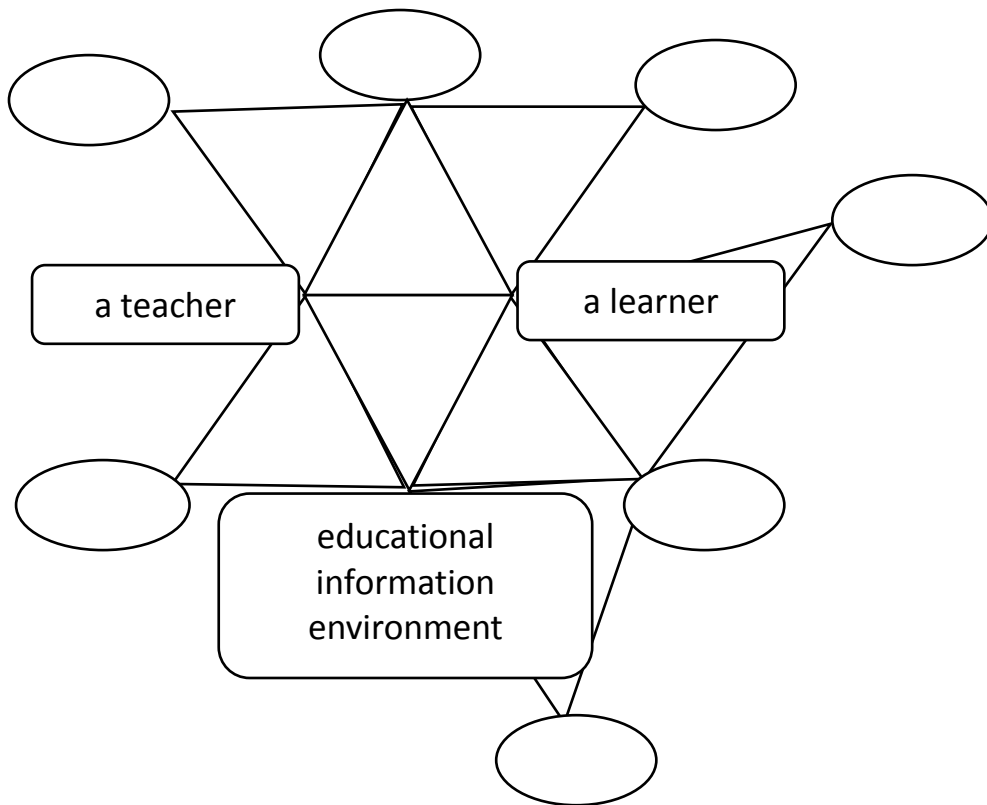


Figure1. Substantial components of the e-learning inculcation methodology in the Republic of Kazakhstan

Notations: 1 - Chance of learning and informational interaction essence in the e-learning inculcation conditions
 2 - Development of e-learning inculcation scientific-pedagogical and educational-methodical ensuring
 3 - Development of methodological problems of a teacher's preparation for work in the e-learning inculcation conditions
 4 - Identify of mobile learning characteristics
 5 - Scientific justification of the measures set on reducing of the negative consequences of ICT means use in education
 6 - Development of health-saving technologies
 7 - Evaluation of the educational products quality

Now we give a brief description of the components shown in Fig.1.

E-learning on the information communication technologies basis is considered as purposefully organized activity for educational process subjects interaction on the basis of telecommunication access to information resources for educational purposes and to the information technology services ensure. These subjects perform in the interaction result:

- feedback in a result of the interactive exchange by educational information between learner, information source and teacher;
- search, processing, storage and use of scientific, pedagogical, educational, methodological, technological and technical developments, control and measuring materials represented in electronic form;

- different operation modes with an information resource and the learner's actions correction.

Preparation for work in e-learning inculcation conditions is a practical activity on the scientific ensuring bases of the pedagogical staff preparing methodology development.

The educational purposes should be competent in the e-learning realization sphere, needs to implement the informatization in an educational institution, must know the interactive learning means use aspects in this preparing result. In addition to pedagogical preparedness he needs to take one's bearing in the psychological, ergonomic, technical, technological, legal provide matters of e-learning inculcation in their correlation and mutual influence.

E-learning inculcation is fulfilled with active use of pedagogical production manufactured for the information communication technologies realization. This production is presented in the form of educational, educational-methodical, didactic, demonstration, reference materials, laboratory equipment, training programs, virtual laboratories, etc.

The products creation and use must fully disclose the information communication technologies didactic potential with take into consideration by their pedagogical feasibility and requirements to psychological, methodological, ergonomic, technical and technological quality of each production functioned on a base of ICT. The implementation of pedagogical appropriateness and requirements to products quality must be evaluate in accordance with scientifically grounded methodology and parameters write down in the relevant standards.

As noted by R. Sobko, "Most authors at researches of influence of informatively-communication technologies on personality of student are accent attention on positive parties of the use of informatively-communication technologies in education, such as: individualization of studies, of bringing variety in an educational process, possibility of choice of own rate of studies every student, increase of good organization of personality, overcoming of fear for students with the special necessities (for example, with a stammer), simultaneous use of many factors of influence (a sound, image) in combination with possibility of rapid reiteration and control of knowledge that will improve the quality of study of material, development of the creative thinking. We are not denying the positive influence of informatively-communication technologies, but it is necessary to notice that the new stage of their development strengthens negative influences that were before or wretched and in general absent. ... As a result of such relation considerable part of students "lost" in a network, wasting time on an intercourse about nothing in chats and forums searches of new recipes, pictures, videos or other virtual satisfaction of the imaginary necessities. The

lack of time becomes the result of such actions for studies; intercourse of parents and children is break, no time on creative development of personality of young man. Consciously or unconsciously, getting in the snares of new information technologies, the problem of self-realization, developing by flairs personality puts at the last place that farther can result in her degradation, even losses of the professional skills purchased before, losses of health in the different aspects of this concept (Sobko R.M., 2013).

Scientific-pedagogical and methodological ensuring of e-learning inculcation should be direct to the learning content updating and curriculum subjects methodical support materials development, to active inculcation of the ICT in teaching practice and educational resources creation. Scientific and methodological ensuring of e-learning inculcation contains four work directs: organizational and methodical (scientific-methodological base, best teaching practices and student innovation datum, publishing), technological (collection and information processing, planning and conducting measures for e-learning), methodological (generalization, the teachers experience presentation and dissemination).

The scientific-pedagogical and methodical ensuring organization of e-learning inculcation should be based on content analysis of scientific and methodological potential of the collective, programmed and methodical ensuring of educational process. Scientific-methodical activity must proceed in the process of individual and collective creative search.

J. Rubianj, A. Mena, D. Sanchez noted that "It understood like an alternative to learn "at any time, any place and in any way", combines with individualized (or personal) learning ... Some important mobile learning properties are: increasing enrolment, broader student population, flexibility, facilitates equal opportunities for all, situated learning, negotiating knowledge, interaction, sharing, collaboration, communication between cultures, etc" (Rubianj J., Mena A., Sanchez D., 2014).

Kazakhstan's scientists intend to inculcate of "mobile learning" in the country (URL: zakon.kz). But they note that on their own mobile devices (tablets, gadgets and phones) is not quite a positive effect on the children eyesight. Education must adhere to the academic rules and requirements. Inculcation in the educational process of the tablet is a dual thing. Because we not all children with 100% vision. Still, the textbooks, the traditional understanding of education, are tools that should be maintained.

Conclusion

Development of e-learning inculcation methodology is required for use of the information communication technologies possibilities.

Identified structural components of the e-learning inculcation methodology are the basis for practical work in this direction. Further e-

learning development can lead to components expansion. It is necessary to pay special attention to reducing of the negative consequences of youth hobbies by modern information technology.

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