Social-Economic and Psychological-Methodical Aspects of Implementation of Distance Learning

Halyna Kopets, Oleksandra Korud

Abstract – In the paper pre-conditions, problems, social-economic and psychological and methodical aspects of implementation of distance learning are considered.

Keywords – distance learning, social-economic, psychological and methodical aspects of distance learning.

I. INTRODUCTION

Crounds for distance learning development (DL):

G• development of DL is a process resulting from Technological Revolutions of the recent decades, existence of information society at the beginning of the third millennium. It is facilitated by increasing role of information technology and communication in all aspects of society's life (fraction of population employed in producing, processing and transferring information is starting to outnumber the part of population occupied with goods production) [10];

• transferring knowledge and skills by means of DL (including the use of information technologies(IT)) meets the requirements for preparing modern specialists, be it a requirement of social, scientific or technical/technological practice;

• DL is becoming a very defined part of informationally complete education, science and culture;

• fast development of satellite communication, renewal of communicational networks and technologies fit for transferring multi-media content;

• increasing speed of DL development has a positive impact on the process of conducting new technological research and overall society development

II. STATEMENT OF PROBLEM

Solving problems of DL development requires studying, while taking into consideration all of the relevant psychological, social and economic aspects of DL implementation. For effective management of DL development it is necessary to separate problem cases, which arise during DL implementation.

III. MAIN PROBLEMS OF IMPLEMENTATION OF DL

A. Feasibility of incorporating DL into traditional learning techniques is based on the following:

• an intensive development of DL in the world, implementing DL as a necessity, based on requirements of modern practices and technological advances, which allows receiving education throughout the life, while working, thus having a chance for the second or third higher education, shortening the duration of the educational process and implementation of new educational experience into working process.

• great amount of educational information as a separate factor of using new methods of knowledge transfer and interaction within a system "professor-student";

• Internet expansion, its use for DL purposes;

• compatibility between internet and MsOffice Sowtware [3, 4]; rise in technical parameters of data networks, spread of extensive and convenient laser data storage, allowing students to increase efficiency of the educational process.

• creation of electronic textbooks, reference books, dictionaries, virtual libraries and laboratories, which are necessary for best performance of educational process, research and modeling of operation of various technical systems;

• development of multimedia courses and educational programs that combine text, graphical elements and multimedia supplements [6,7,8];

• attempts at development the strategy and tactics of DL in Ukraine, defining the most necessary directions of its development; establishment of DL for pre-university preparation for entrance exams of university students (Kyiv National University).

B. Social and Economic Barriers in DL development:

• poor speed of Internet connection;

• using night time for educational purposes in order to decrease costs of using the networks;

• low efficiency of night time educational practices, decrease in health, psychological endurance due to uncommon study time, based on data of medical services.

Methodical Barriers in DL development:

• usage of DL demands special methodical maintenance of education process;

• there are a lack of approved principles of technical subject teaching in DL;

Halyna Kopets is with the Institute of Economics and Management, Lviv Polytechnic National University, S. Bandera str 12, 79013 Lviv, Ukraine (e-mail: gkopets@hotmail.com)

Oleksandra Korud is with the Computation Center, Lviv Polytechnic National University, S. Bandera str 12, 79013 Lviv, Ukraine.

• the most important question is to form strong knowledge during students studies;

• a separate questions is protection of intellectual property of lecturer - script writer;

• very important question is a problem of pedagogical skills (such person must be aware of the following thesis: control function belongs to "human" factor and teaching function belongs to "technical" factor);

• a keen problem is usage of special textbooks (basic textbook). From student side a perception of new material is more simple;

• a separate question is a problem of interface which connects a form of information presentation and effectiveness of it perception. Now it is interface built at the level of natural language.

C. Psychological processes in DL development:

• better student's perception of electronic data means, as compared to common text ones, perception of them as being more modern, up-to-date and appropriate;

• increasing number of successful employment after finishing a DL course or education, including employment through internet agencies;

• attracting people who are temporarily not working or are on unpaid vacations, which results in the feeling of greater social realization, increases selfesteem and decreases psychological tension in society.

Social and Economic Consequences of DL implementation:

• increase in employment rate resulting from faster educational processes due to DL;

• budget increase due to extended taxation;

• increase of cash flow of alumni foundations at the universities, improvement of material and educational base of universities;

• increase in overall professional level of population, decrease in social tensions, improvement of criminal situation.

D. Psychological barriers of DL development:

• when developing technical intellect it is important to form creative thinking by technical tasks solution;

• considering of psychological- physiological factors, namely: duration of educational information readout is limited; information presented on several monitors demands to strain associative memory;

• abrupt change from classic education leads to deep psychological exertion of students;

• psychological distrust in objectivity of marks when computer tests are used;

• to form teaching and methodical materials for conducting of education process some psychological reorganization of lectors is needed;

Obligatory Directions of Modern DL development:

• provision of appropriate legislative and financial support of DL from state and the private sector, their partnership in solving the problem of increasing role of higher education establishments in development of scientific research (Declaration on Scientific Issues and Use of Scientific Knowledge, Budapest, 1999) [9];

• cooperation at the international and interregional levels on the problems of improvement of educational programs, software and IT technology used in DL; (UNESCO, International Scientific (ISCU); UNESCO MPI Scientific-Council Educational Center of Information Technologies and Systems (MSEC));

• increase in DL prestige of selected educational institutions, improvement of quality level of DL courses;

• decreasing real bias of students' knowledge evaluation and academic honesty for receiving DL degrees;

• spread of modern scientific and other information through DL;

• strengthening the role of national and international associations of scientists and universities in DL development;

• necessity for regulating information flows between universities;

• protection of Ukraine's intellectual potential in the field of international information flow (this budget expense is planned to be increased to 4 billion USD in US) [10];

• preventing isolation of DL, extending informational base of DL with interdisciplinary knowledge;

Such problem cases have to be dealt with in DL:

• cheating on home task completion;

• biased knowledge evaluation;

• absence of psychological contact., a in encouraging student's interests by the teacher etc.

Defined situations are solved through future practical activity of DL graduates (supplementing necessary knowledge, dishonestly earned knowledge is revealed, which requires additional time for their supplementation or practical verification.

The following is necessary for DL development in Ukraine:

• support of state and private institutions;

• creation of economic grounds and possibilities for increasing the number of internet users and network users, extending the market for DL services (Citizens of the USA and the European Union amount for 50% share of the increase of the number of internet users in the last few years);

• improve technical parameters of usage of communicational equipment and networks, improve the quality and speed of connections;

• increase the amount of investments in the development of IT, including communications networks (about 40% of world's investments in computer technology is generated by the US, the number of computers per employee is 5 times higher in US than it is in Europe and Japan taken together[11, p.5]);

• increase Ukraine's export of education as service, which now amounts for less than 1% of educational services offered. It also has a great

IV. CONCLUSIONS

Implementing DL in Ukraine has certain grounds, including Ukraine's one of the leading places among state's with highly developed market economies in terms of people with higher education per 1000 employees (Germany – 190, France – 220, Japan – 230, USA – 360 and Ukraine – 336). Research points to a strong correlation between level of education and earned income during a person's lifetime. The role of knowledge in economy is increasing, becoming one of the main factors of production. DL development will facilitate the rise of comparative economic advantages of Ukrainian education, science and business under current trend for globalization of international economic processes.

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