

SOCIOLOGICAL AND PSYCHOLOGICAL DIMENSIONS OF E-LEARNING

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ABSTRACT

The adage “there are two sides to every story” applies, also, to e-Learning. This, relatively new mode of courses delivery provides opportunities for knowledge distribution to persons residing even to the most remote geographical areas. At the same time, the implementation of this reform creates problems, which should be given the necessary attention, if it is to be effective, as it will be explained and supported in this paper.

The globalization concept prevailing in our times has revolutionalized many sectors of our everyday activities, which have become more demanding. It is generally agreed that certain deficiencies in education and training have delayed and deferred developments in many countries. Economic realities have been changed resulting to significant impact on enterprises.

To cope with the emerging demands, businesses have to change their strategic plans in regard to their training programmes and adapt to the requirements of knowledge-based and skill-based economy. This means that the qualifications of workforce have to be upgraded, whereas prospective employees should be educated in a way to meet their current market demands.

In the present state of our civilization people have time off work, which, however, is not adequate to give the workforce the chance to upgrade their qualifications or to individuals to pursue educational courses through classroom attendance. Besides, economic problems are an additional problem for educational/ training courses delivery on campus.

The advent of e-learning will facilitate the implementation of educational and/or training courses to everybody interested.

In this paper discussion will be focused on two dimensions of e-learning, the sociological and psychological, based on empirical research carried out among educationists, sociologists, psychologists, teachers and end-users.

In the sociological sector focus will be given to the relationship between educational planning and economic, political, cultural and social forces of the society. Additionally, the relation between teachers and students and the role of behaviors of the participants in the e-learning educational systems will be analyzed.

In an e-learning environment emphasizing learning-centered activity and system interactivity, the impact of psychology promotes self-management focused on the enactment of learning goals, self-monitoring, and motivation of students to achieve quality educational outcomes. Learners are no longer the object of educational guidance and obligations but the subject of their education and learning autonomy.

Finally, the conclusion part will provide recommendations on how sociological and psychological dimensions of e-learning can influence the most effective implementation of the system.

Key Words: Sociological dimensions, psychological dimensions, e-learning.

INTRODUCTION

The old adage “there are two sides to every story” has attracted controversial opinions among analysts. Most people can attest that there are many sides to every story, though the Merriam Webster Dictionary defines the term as often metaphorical which illustrates some truth, and truth cannot be considered “multifarious”. Besides, according to Frank Lloyd Wright, the truth is more important than the facts, which means that this adage enjoying credit for long use applies to e-learning as well. It is accepted that the vast movement towards e-learning is clearly motivated by the many benefits it offers (Kruse, K. 2008). The question is whether the benefits provided by this course delivery system outweigh the drawbacks.

Selectively, among the advantages of e-learning for students the following can be included:

- individualized teaching process,
- reduced learning time,
- convenient selection of study time, and, therefore, self-pacing,
- interactivity and quick availability of reference materials.

On the opposite side, the following disadvantages of e-learning are identified:

- technophobia of learners,
- more difficult acceptability of reference materials on the part of learners through PDAs (personal digital assistants), PCs, software and other information technology systems as compared with the easily accessible printed workbooks.

Nevertheless, e-learning seems to be the most reliable contemporary media of knowledge distribution even to the most remote geographical areas and/or boundaries where students can be reached regionally, nationally and even globally. This merit is recognized by a great number of researchers, analysts, educators and end-users.

In parallel, this rather revolutionary means of delivery of educational and/or training courses is considered to be the most effective in meeting the overall market demands arising from the advent of globalization.

Though globalization is one of the most debated issues of our times eliciting both great enthusiasm and deep concern (United Nations, 2001) to develop and manage a global organization means to teach people how to think, lead and act. This means that people will have to be made to possess a global mind as well as global skills (Kim, Pan Suk, 1999).

Therefore, globalization is not only a movement of intensified flow, between countries, of goods, services and cultural activities but is involved in a variety of trends and tendencies, which result to a multidimensional character.

On the threshold of the second decade of the 21st century, the e-learning educational and/or training courses delivery medium is the most effective means of support of businesses in their effort to change their strategic plans for upgrading their programmes and enable their workforce to cope with the emerging multidimensional demands of globalization.

It is accepted that education, at any level, is a complete, dynamic system. It develops and transforms from one condition to another, in the process of its function, under the influence of external factors (Serdiukov, p. 2001).

Undoubtedly, one of the most important factors influencing the development of educational systems nowadays is e-learning. At the moment, it is the unique system which is based on technological means of instruction, eliminates geographical boundaries and integrates academic and real world characteristics

providing students with wider and more affordable choices. Moreover, in a pluralistic society, like ours, this course delivery medium results to a re-orientation of traditional schools and makes possible an amazing integration of global resources.

LEARNING CONSEQUENCES OF GLOBALIZATION

e-learning Trends

Admittedly, globalization has revolutionized literally every sector of our everyday activities. Economic realities have dictated to businesses to change their strategic plans as concerns their training programmes, has facilitated individuals to take educational courses through e-learning courses delivery and enabled educationists to adapt their curricula to the requirements of knowledge-based and skill-based demands of economy. In parallel, e-learning environments facilitate the development of intercultural awareness in students (Belisle, C. 2008).

In consequence of these trends, schools are expected not only to be concerned with learners' intellectual, moral and social development by means of opening up access to worthwhile knowledge and experiences, but also to be involved in their socialization inducting them into the customs, conventions and accepted practices in society (Lawton, D, & Gordon, P. (2000).

In view of the foregoing a representative sample of education participants selected at random were asked to complete a 20 item EPS (Educational Participation Scale) and rate the importance of certain factors connected with the teaching process and particularly the specific merits of e-learning, which make the difference as compared to the traditional theories for learning.

There were three options in the rating scale, that is, N=not important, I=important and V=very important. A factor analysis of the responses to the questions asked concluded to five first-priority factors for each sector.

Question 1: Which drawbacks of e-Learning do you consider very important?

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|----|---|-----|
| a. | The need of learners to have technological skills | 72% |
| b. | The lack of live educational environment | 66% |
| c. | Reduced cultural interaction | 65% |
| d. | Occasional Communication problems | 58% |
| e. | Certain factors may predispose learners against
The use of computers | 46% |

Question 2: Of the listed intrinsic and extrinsic motivators which do you consider very important?

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|----|--|-----|
| a. | Learners' needs and drives | 95% |
| b. | Autonomy of learners throughout the courses span | 90% |
| c. | Interest in the learning material | 86% |
| d. | Learners' personality | 85% |
| e. | Learners' upbringing | 70% |

Question 3: Of the listed dimensions and merits of e-learning which do you consider very important?

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|----|---------------|-----|
| a. | Sociological | 89% |
| b. | Psychological | 87% |
| c. | Pedagogical | 65% |
| d. | Technological | 60% |
| e. | Institutional | 54% |

In fact, the basic framework for web-based electronic learning includes a number of distinctive characteristics.

To identify the most important dimensions of this medium, this survey has been drafted to be the “prelude” of a reliable analysis of the findings of empirical researches aiming to secure the most effective implementation of e-learning mode in the educational and/or training courses delivery. In particular, the concept was to confirm or to proceed to modification, where necessary, of the teaching theory concerning the nature of human interests and motivations, which emphasize the psychological and sociological dimensions of e-learning (Engvig, M. (2002). Thus, the findings of this survey were taken into consideration when drafting the problem-questions of the empirical researches which were connected to the identification of the role of sociological and psychological dimensions of e-learning.

Sociological Dimensions

It is agreed that the globalization of the economy brings together people of different hemispheres, cultures and civilizations. Therefore, people who need to communicate and understand each other (Belisle, C. op.cit) have to cope with social demands as well. To this end, the most important objective of education is socialization. This educational concept has been reaffirmed in a series of ministerial decisions, which considered the social dimension of crucial importance and integral part of learning processes.

It is to be noted that in all meetings held in Bologne (June 1999), Prague (May 2001), Berlin (2003), Bergen (May 2005), London (May 2007) and Leuven (April 2009) the resulting declarations emphasized the social dimension of learning with specific attention to the enlargement of the Bologna process (Pargue declaration, op.cit.).

Through the empirical research, educational participants of varying level were asked to complete a 25 factors questionnaire and rate them according to the importance of the role that the sociological dimension of e-learning is considered to play in the whole education process. The scale of evaluation ranged from 1 to 5 where 1 stands for quite unimportant and 5 very important. A further qualitative (unstructured interviewing and case studies) analysis of the responses concluded to 10 priority factors pertaining to the social dimension of e-learning as follows:

The sociological dimension of e-learning gives the possibility to learners:

- | | | |
|----|---|-----|
| a. | To cope with market demands successfully | 95% |
| b. | To implement structured and goal oriented course material | 92% |
| c. | To enjoy practical benefits for everyday working life | 89% |
| d. | To enjoy equal opportunities in education | 84% |
| e. | To raise the level of knowledge, skills and competencies | 82% |
| f. | To facilitate the approach of educational courses for everyone, anytime, anywhere | 81% |
| g. | To be active members of their social environments | 80% |
| h. | To ensure appropriate socialization through internet connections and communication | 76% |
| i. | To diminish obstacles to course attendance related to their social and/or economic background | 75% |
| j. | To eliminate class conflict with work responsibilities which reduces commuting time and flexibility in studying | 73% |

Undoubtedly, ours is an era of magnificent, impressive and rapid change in technology, science, thought, culture and intellect. If we are, then, to meet the resulting economic, technological and demographic challenges successfully we must proceed to revolutionary reforms to educational practices. Obviously, there has been so far a serious gap between ideal and reality in the educational system in a number of countries, mainly undeveloped or under development. How a teacher transforms, or attempts to transform ambitious

ideas into practical reality is disputed nowadays. One reason is that in the twentieth century more was expected of teachers, whereas, at the same time, quite paradoxically, their authority had been increasingly questioned. The contemporary concept about the role of education prioritizes its sociological and psychological dimensions, which provide the means to stimulate thinking and communicate ideas with real impact through technology and innovative media of courses delivery. Indeed, education must go step-in-step with the development in the society.

Psychological Dimensions

Motivation is a dynamic powerful drive which enables individuals to attain the objectives of their everyday lives and mainly their educational and/or training goals. Additionally, motivation facilitates autonomous learning, which is considered to be an effective vehicle for learners to identify their goals, formulate and even change them to suit their own learning needs and interests. The types of motivation are intrinsic or extrinsic. In the first case, it refers to the determination of behavior related to an activity and sustained with autonomous acts and interests, which can be considered as relating to the self determination theory. On the other hand, extrinsic refers to external interests.

This theory supports that man's actions are determined by his own nature, character or volition and constitutes an approach to learning, which requires learners to exercise a high level of control over their source of motivation. The higher the motivation, the better the performance. Undoubtedly, the desire for knowledge leads to learning outside the classroom (Benson, P. 2001).

According to Deci, E., Vallerad, E., Pelletier, L. and Ryan, R., unlike other theories, self-determination theory addresses the energization and direction issues by postulating about basic psychological needs that are inherent in human life.

As a result of the implementation of the self-determination theory motivation, performance and development are maximized within a social context which makes it possible for people to satisfy their psychological needs for competence and autonomy (Deci, E. et.al, op. cit).

To identify cognitive and psychological factors, which differentiate e-learning course delivery media from traditional classroom attendance an empirical research was carried out in the brief span of four months. The sample of 136 education participants was randomly selected among individuals of varying levels, i.e. psychologists 30 (22.05%), policy makers 36 (26.47%) , researchers 34 (25%), teaching staff 20 (14.72%) and end-users 16 (11.76%) , of which male 72 (52.94%) and female 64 (47.06%).

Interviewers were asked to complete a 30 factor questionnaire and rate them according to the importance they attach to the psychological dimension of e-learning. The scale of evaluation ranged from 1 (quite unimportant) to 5 (very important).

A further qualitative (including unstructured interviewing and case studies) analysis of the responses concluded to 10 priority factors of psychological dimensions of e-learning, as follows:

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|----|--|-----|
| a. | Freedom of choosing the pace of study | 96% |
| b. | Goal directed educational courses as a result of self-management | 94% |
| c. | Motivation for further attendance of higher education courses | 90% |
| d. | Better time management for studies | 86% |
| e. | Effective autonomous behavior | 80% |
| f. | Improved self-discipline | 82% |
| g. | Formulation of learners' characters | 80% |
| h. | Development of useful learning tasks | 79% |
| i. | Learners' relationship with other users | 75% |

- j. Development of intrinsic desires for attainment of targets and knowledge 73%

Based on the analysis of the responses given by the interviewees during the unstructured interviews a very important concept has been revealed, namely pressure from teachers and/or administrators and/or parent groups result to negative effects on the learners' self-determination, conceptual learning and personal adjustment (Deci, E. et.al., op.cit).

CONCLUSION

According to the predictions of the Secretary General of the United States (2001) "the new information age is widening the range of information available to anyone anywhere, enhancing and modernizing the exchange and sharing of information, training and education.

The potential of on-line education for reaching individuals living in remote areas is of great importance".

Probably, such an official acceptance of the benefits resulting from the implementation of e-learning in the educational and/or training courses delivery reinforces the concept of supporters of the system which is by far the most effective vehicle for learners to achieve quality educational outcomes. In fact, according to this system, through learning-centered activities and interactivity a person is no longer the object of educational processes but the subject of learning autonomy.

The qualitative analyses of the findings of the atypical survey as well as the empirical researches which followed revealed the positive impact of e-learning media in our attempt to meet the contemporary globalization demands quite successfully. Whereas some drawbacks of e-learning have been identified as pertaining to technological factors, the importance of motivators, both intrinsic and extrinsic, have enjoyed a wide recognition. Moreover, the high rating of importance attached to the sociological and psychological dimensions of e-learning consolidates the notion that e-learning developers should consider the impact of these dimensions on the educational and/or training courses delivery since the desired outcome is to secure the best effectiveness of the system.

Concerning the evaluation of the social dimension of e-learning the interviewed educational participants in their majority focus their concern to its impact on their working lives (30% with average rating 92%), their social connections and relationships (30% with average rating 76.33%) and the educational benefits (40%) with average rating 80.50%).

In parallel, online learner's rate psychological dimension in e-learning by referring to three sectors, i.e. the study conditions (40% with average rating 87.75%), the learning motivation (30% with average rating 82.34%) and the formulation of learners' characters (30% with average rating 80.67%).

In our era of accelerated technological development reforms in education and training systems have experienced a recognition as being of crucial importance, mainly due to e-learning. Though a number of debates reveal a deep concern for the effectiveness of the system and its innovative nature, the high quality of this medium is not simply the result of relationship between learners and e-learning providers. It is based to a great extent on individual learning preferences and its sociological and psychological dimensions. Thus, the transformation from traditional, on campus, instruction to web-based learning reveals a shift in reshaping educational models in the recent years and reflects a change in our perception of the current phase in the development of education (Serdiukov, P. 2001)

Since learning goals have been transformed in order to meet the current demands, it is important that educators, policy makers and other educational participants might be necessary to take into consideration the following recommendations based on the qualitative analyses of the findings of the two empirical researches, which were carried out recently. Such recommendations are divided into two categories, i.e. the Socio-Psychological sector and the Educational Organization sector.

Socio-Psychological Sector

- a. Sociology and mainly sociology of education must be closely connected with problems which educational planners have to face.
- b. Education should be equally accessible to all and enable students to complete their studies without obstacles related to their social and economic background.
- c. Arrangements for delivery of courses which schools in small geographical areas cannot offer.
- d. Motivation should be emphasized on condition that learning activities are authentic, challenging and multidisciplinary.
- e. Provisions should be taken to ensure the constant updating of the knowledge and skills in the modern societies.
- f. Fostering of social cohesion which will reduce inequalities and raise the level of knowledge, skills and competencies in society.
- g. Evaluation of the quality of educational multimedia products taking into consideration the individual, the learning approach or model, specific characteristics of multimedia technology, the environment and the relationship among all these factors (Shavinina, Larisa V, Loarer, E. 1999).
- h. Emphasis should be given on the factors influencing motivation to learn, i.e. needs and drives, interest and values.
- i. Creation of opportunities for the internationalization of personally valued behaviors.
- j. Creation of a more conducive social environment.
- k. Effective matching of technology with the background and needs of the learners.

Educational Organizational Sector

- a. Educational reforms must be adapted to fit real needs.
- b. Planning of appropriate organizational structure of education and/or training.
- c. Design and development of quality learning materials.
- d. Inter-college collaboration.
- e. Implementation of all three types of technologies currently known and available, i.e. instrument technologies (video and DVD), instructional technologies (TV) and dissemination technologies (C.D. or Web)
- f. Use of computers as a vehicle for studying.
- g. Enhancement of learners' skills by means of appropriate tools relevant to specific cognitive areas.
- h. Flexibility in the design of teaching programmes.

It is believed that in case these recommendations are followed the implementation of the e-learning system will be more effective. This output will confirm that educational planning will succeed only if social and psychological sectors are given the proper attention.

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