

# EDUCATIONAL INOVATION AND CONSUMER BEHAVIOUR. A STUDY OF STUDENTS' PERCEPTIONS ON THE USE OF E-LEARNING IN CLASS.

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*In European and international context of a knowledge-based society, education becomes a strategic element of sustainable economic growth. Developing human capital and adapt its training to the present requirements of the labor market requires major investments both in the formal education system and in individual study. In his position as a promoter of change, the educational environment must actively respond to external challenges, demonstrating a strong flexibility and openness to new.*

*Implementing the concepts and marketing strategies in the educational environment have gradually led to the development of educational services and improvement of their quality. Focusing on student, the mainstream of marketing, brings in front his requirements and expectations, and the development of the educational strategies aim to satisfy his information and intellectual development needs. School success is reflected in its students achievement as a successful commercial product is observed by analyzing sales figures recorded.*

*Frequent changes occurring in society as a result of accelerated evolution of technique and technology have made their mark on education. The assimilation of innovations in the traditional educational processes imposed and behavioral changes and adaptations to all education stakeholders. Thus knowing the consumer behavior, the influencing factors and the psychological processes decision making, becomes essential in creating an effective education system.*

*The emergence of e-learning platforms as a result of the growing importance of lifelong learning and integrating them in the traditional educational environment was a crucial moment in the evolution of educational practices. Focusing on computer, Internet and intranets, e-learning brings education a surplus of interactivity, interaction, responsibility and collaborative learning. Considered as innovative solutions, initially, complementary to the classical teaching techniques, e-learning technologies gradually penetrate the traditional classroom learning environment.*

*Introducing innovation in the educational environment causes changes in the behavior of all actors confronted with it. Hence, knowing the perceptions of the main consumers of knowledge is a key element in the implementation process of innovation and assessing its effectiveness. This paper aims to develop major behavioral theories on e-learning environments, seeking to establish and explain the attitude of students, the main consumers of educational services, in terms of their perceptions about the introduction and use of these technologies in the classroom.*

*Considering the results of the presented study may be the starting point in developing a complex behavioral pattern specific of the educational market by integrating behavioral aspects of all actors involved in providing education and confronting them with the main factors of influence.*

**KEY WORDS:** *education, consumer behavior, innovation, e-learning*

**JEL CLASSIFICATION:** *M31, I25*

## **INTRODUCTION**

In the context of contemporary society, education becomes an activity centered on the development of intellectual capacities of the individual, and highly influenced throughout the life by his desire for knowledge and by his practical experiences. Educational process is seen as a continuous and evolving one, depending on the age and level of preparedness of the individual.

According to the report of the European Commission, European Union countries were to develop by the end of 2010 the most competitive and dynamic knowledge based society (European Commission, 2004: 5). This directions are long –term maintained. Knowledge-based economy becomes a reality of contemporary society and education its main mobile.

New knowledge-based economy considers human capital as the main factor of economic progress and social event. Therefore contemporary society is becoming increasingly linked to the quality of the educational system, the primary creator and distributor of knowledge. The complex process of knowledge consists of three phases: transfer, assimilation and interpretation, and dissemination of information. All these are based on the individual's intellectual capacity, able to provide added value to the information received through an internal process of interpretation of the meaning of objects and events. In this conditions the role of education is not just the mere transmission of information but also providing the necessary specific dissemination through the socialization process. Through education the individual can provide himself with superior adaptation to the environment in order to enhance his welfare and that of the whole community.

The social transformations caused by the emergence, development and direction of the new knowledge-based economy have led to multiple changes in the educational system. Although the general structure of education has remained constant, the attempt to identify the best learning and evaluation option lead to a progressive change in the content of the mandatory superior education system and especially in the compulsory education. Most of them concern the introduction of IT technology in the educational environment as the main agent of transmission, dissemination and evaluation of information and their level of assimilation.

Lisbon Strategy reaffirms the need to integrate technology into the educational environment in order to promote innovation. Information and communications technology is considered “the backbone of the knowledge economy, the main engine of economic growth” and social development. (European Commission, 2005: 20-23).

The European quality standards and the need to adapt to specific requirements of the labor market have forced both the resizing and reshaping of the educational processes in terms of curriculum and teaching techniques used in formal education and also at the level of the continuing education. Now the boundaries of this two types of educational activities are undetectable, thus ensuring the continuity of the formal education through informal education. The specific forms of the educational products change from an unidirectional process to a bidirectional one. The role of student’s feedback grows, emphasizing the importance of interactive, proactive and anticipatory learning. Integrating e-learning technologies in the formal education and their widespread use in continuing education is the solution to the requirements of a modern and effective student - centered educational system.

## **LITERATURE REVIEW**

XXI century education involves the identification and proliferation of three essential elements: professionalism and quality in lifelong learning, creating and developing knowledge and its dissemination. At the base of these three elements is situated innovation, a major importance being achieved by the IT innovation (Weert, 2006: 217). The need to develop collaborative learning contributed to the emergence and widespread use of virtual environments as a social

communication support and educational interactive learning. E-learning becomes an important driver of educational change and of its adaptation to the requirements of European integration. Ever since the first e-learning technologies, many researchers have attempted to define the typology of these educational resources based on specific tools and processes which underpin their functionality in order to identify the degree of efficiency in the acts of teaching and learning. Derek Stockley defines e-learning as "the delivery of instruction or training program through electronic means. E-learning involves the use of computer or electronic media to ensure the transfer of educational material" (Stockley, 2003: 32). The definition identifies the main characteristic of e-learning environment (use of computer or electronic media), but only indicates the transfer function of the systems presented, neglecting their contribution in the reception, detention and interpretation of materials delivered and interactive feedback results.

Considering the main objective of the e-learning platforms – to facilitate the transfer of information and their assimilation with maximum efficiency, such systems have been designed and developed based on the mental processes taking place in the minds of the learner.

Sigal, M. (Sigal, 2002: 31) explains the typology of e-learning systems starting from the four processes of knowledge identified by Piaget: assimilation, accommodation, balance and imbalance. Knowledge creation process involves interpreting the information received from others and dissemination of new information (feed-back) to the external environment. Through learning, individuals develop their memory and acquire the capacity to analyze information received from the environment and to produce knowledge.

"Today we are facing a paradigm shift in the development of the learning support systems: in recent years, their development was mainly focused on technology and now it focuses on applying specific concepts of human behavior in using new learning, communication and business technologies. Recent neuroscience research highlights together with the cognitive elements, the predominant role of emotions, intentions and social factors in learning. " (op.cit. Trausan - Matu, Cristea and Udrea, 2005 : 22). This requires a deep knowledge of students' perceptions on the use of such innovative technologies in the classroom, and so explaining student's attitude (acceptance or rejection).

The main behavioral approaches concerning e-learning placed the student in the center of its interests. Integrating e-learning platforms in daily life especially in education cause major changes in how people learn, "concentrating on the needs of students rather than on those of teachers or educational institutions" (Cross, op. Cit. Aldhafeeri, 2006: 711). Students are parts of a whole – the e-learning community, therefore their involvement in the evolution of the entire community is essential to its existence.

Given the development of e-learning based on a pedagogical model that assumes students' responsibility for their study, Porras - Hernandez (Porras - Hernandez, H., 2000: 385-392) speaks about the theory of self - regulation in the study of students, considering this to be a very important feature in increasing academic achievement through e-learning environments. Motivation and individual self – control are also relevant factors in ensuring a coherent community.

"In the area of e-learning, students are considered consumers who should receive quality services" (Rossett, op. Cit. Aldhafeeri, 2006: 711). Providing high quality educational products by adapting them to specific consumer requirements is one of the objectives of the educational e-learning systems.

Studies carried out in order to identify students' perceptions on the use of e-learning highlighted the advantages and disadvantages of these environments. Patricia Borstorff and Keith Lowe (Borstoff, Lowe, 2007:19) reflects through their research the main benefits perceived by students: flexibility and the convenience offered by these technologies during individual study and also in

formal education. Most of those questioned also identified as the main disadvantage of e-learning environments the limited communication with the teacher.

Based on the study of perceptions developed by Lowe and Borstoff but taking into account all the other research on consumer behavior within the e-learning communities and the premise of student – centered activities, this paper aims to identify students' perceptions on the use of the e-learning platforms in classroom.

## **RESEARCH METHODOLOGY**

The present research aims to identify the perceptions of students on the use of e-learning platforms and on the integration of e-learning in Romanian education system. To achieve this goal were used specific tools and techniques of qualitative research. Through in-depth interviews was identified the general perception of secondary school pupils on e-learning and also the causes that led to it. The semi-guided interviews were made based on a conversation guide shaped around three main objectives: to determine students' perceptions on e-learning platforms, determining the perception of quality in educational environment and to identify the main advantages and disadvantages of e-learning environments. The sample includes a total of 24 people, high school students, with an equal gender distribution. 60% of respondents go to an urban area school and are aged between 16 and 18. Group selection was not guided by the use of these technologies in schools because it aims to identify general perceptions of e-learning environments and not that which refer to a specific use.

## **RESULTS**

The research reveals an overall positive perception of the students interviewed, regardless the use or the environment in which they entered in contact with e-learning. Most of those interviewed (80%) reported personal use of e-learning platforms during individual study and denied the use of innovative technologies within the school to which they belong.

Asked to define an e-learning platform in three words, many respondents were hesitant and late in providing the answer. Mostly the e-learning platform was defined by terms such as "Internet", "Programs", "projections", "interaction", "PC", "image". Very often the term used is "team" which outlines the students perceived contribution of e-learning in creating a collaborative learning environment. The terms used by the subjects of the study are correct, most components or features delimiting basic e-learning platforms.

In the case of the assisted associations students have designated e-learning platforms by linking their characteristics with the attributes of an animal. Over 70% of students have associated e-learning systems with a cheetah, based on speed as the main attribute. 15% of the students participating in the study believe that an e-learning platform is "friendly and nice" like a Koala Bear, and only 2% associate it with a repulsive rat. Even if the subjects have never used an e-learning platform, they associate positive characteristics with it.

Regarding the advantages and disadvantages of e-learning, students have identified as main advantages interactivity, the evaluation methods used and the mix of images and audio elements and video presentations within the e-learning lessons. Most of the respondents believe that e-learning classes are more interesting and helps them better retain the information transmitted by the teacher. The agreement of students is expressed also on the question of obtaining superior results by using teaching technics based on multimedia technologies. Although consider the lessons taught in e-learning laboratories to be more interesting than traditional lectures, students participated in the study do not consider that their level of attention would be increased.

## **CONCLUSIONS**

In Romania, although the formal education area remains mostly public, the growing importance of lifelong learning based on the use of online environments, and also the actual pressure of the labor market changes, enabled the penetration of computer-assisted teaching systems in classrooms.

The requirements of the new economy and the state of the Romanian education require increasing investments in education in order to align the local education system to European standards and global education. To function effectively, educational institutions, regardless their level, must know and consistently measure the quality of educational services and products provided by comparing them with their students' requirements.

Their quality is the main competitive advantage it may hold the existing competitive educational market. Providing quality service should start from the knowledge of demand, consumer needs and expectations, as they participate in development of a product or service and therefore can decisively influence the final performance and quality.

Identifying students perceptions on the use of e-learning platforms in the classroom allows shaping a current image on the quality of the education environment and the guidance that it should follow to meet the requirements of the main consumers. The recognition and appreciation by the students of the main advantages of e-learning platforms and their contribution in improving the education system are premises for continuing innovative actions within Romanian education sector. The receptivity manifested among children about the use of innovative technology is based on two underlying principles: interactivity and collaboration in teaching – learning processes. Developing an e-learning community and its integration not only in continuing education but also in compulsory education facilitate the adaptation of the Romanian education system at the European and international standards in quality and efficiency.

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