

UNDERSTANDING STUDENTS' PERCEPTION, EXPECTATIONS AND THE NEED OF INNOVATING EDUCATIONAL SERVICES IN THE DIGITAL ECONOMY CONTEXT

Maria-Cristiana MUNTHIU¹, Iuliana CETINĂ²

¹ Université de Picardie Jules Verne, Amiens, France

² Bucharest Academy of Economic Studies, Romania

Abstract

The online environment increasingly changes all societal aspects including students' behaviour, expectations and quality perception of educational services performance. These are all extremely important issues to be understood in order to satisfy them at the highest level possible. This paper aims at thoroughly analyzing the changes occurred in students' expectations and how educational services provided in universities and business schools have been adapted in order to meet their expectations. The objective is to clarify these aspects and to provide a theoretical basis for future researches on students' satisfaction concerning educational services in the online environment.

Keywords: expectation; perception; education; online; service quality.

JEL classification: M31

1. Introduction

In the last decades, continuous development of ITC (information and communication technologies) has determined a **growing need for flexibility of educational services** provided to students. Nowadays, more and more universities offer and develop **online courses** and **educational programmes** in order to offer supplementary options to their students. The body of the present article presents changes registered in the more and more sophisticated needs of online educational services users and in the structure of online educational environment, which should ensure excellent educational

¹ Business Administration Institute, maria-cristiana.munthiu@u-picardie.fr

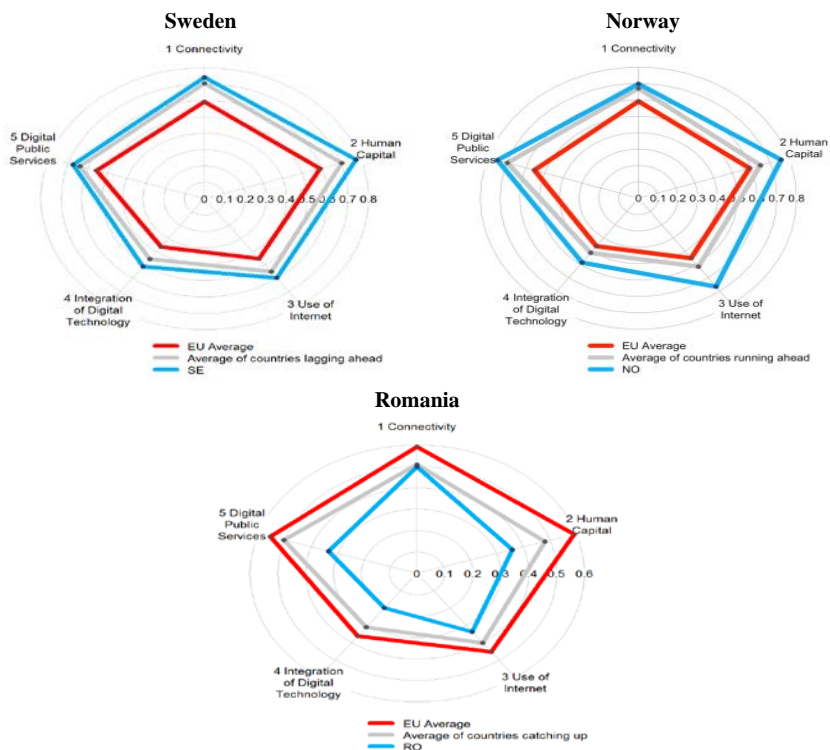
² Faculty of Marketing, iuliana.cetina@gmail.com

experiences and the premises of a successful career. Therefore, all higher educational institutions should acknowledge these aspects and constantly improve the quality of their educational services, both online and offline.

2. Digital economy and online educational services

Online educational teaching programmes are a subject of great concern lately (Tomte *et al.*, 2015, Bryant and Bates, 2015, Hamid *et al.*, 2015, Sarapin and Morris, 2015, Smrithi Rekha and Venkatapathy, 2015). The study done by Tomte *et al.* in 2015 focused on Universities from Norway and Sweden, more exactly Telemak University College and Karlstad University, and showed that there is a *need for developing professional digital competence in **online educational services*** (Tomte *et al.*, 2015, p. 26). Knowing that Nordic countries are the most frequent users of Internet in Europe and with the highest percentage of population with computer skills (Digital Agenda Scoreband, 2013), Romania should try to increase its results concerning the Digital Economy and Society Index (Digital Agenda Scoreband, 2016). The below-presented graphics present the current situation of the DESI Index in Sweden, Norway and in Romania – which still has a lot of catch up to do. For example, Sweden ranks 3 among EU countries. It is part of the group of countries that are lagging ahead.

Figure 1. Comparison DESI 2016³ between Sweden, Norway and Romania



Source: Digital Single Market, Digital Economy and Society, provided by the European Commission, <https://ec.europa.eu/digital-single-market/>, accessed the 28th of February 2016.

Romania ranks 28th out of the 28 EU Member States concerning the DESI Index, even if more and more people subscribe to broadband networks

³ According to the Digital Agenda Scoreband website (2016), The Digital Economy and Society Index (DESI) is a composite index developed by the European Commission (DG CNECT) to assess the development of EU countries towards a digital economy and society. It aggregates a set of relevant indicators structured around 5 dimensions: Connectivity, Human Capital, Use of Internet, Integration of Digital Technology and Digital Public Services.

of very good quality, the majority of the population has low level of digital skills and there is a well-spread lack of trust of making transactions online. On the other hand, connectivity in Romania is increasing (from 4.7 in 2015 to 5 in 2016, the 23rd place in the EU) and, surprisingly enough, Romania has the best performance in the EU in the case of high-speed Internet access and is one of the leaders with 63% of fixed Internet subscriptions to fast broadband, ranking the 2nd best in the EU. In addition, networks which provide at least 30Mbps are used by 72% of Romanian households (more than the 71% EU average), according to the Digital Economy and Society Index 2016 Romania Country Profile provided by the European Commission.

By taking all these aspects into consideration and the fact that young people in Romania, in particular *students*, have developed and master great digital skills, building an *online environment that enhances students' interest in new online course content* has become of utmost importance (Bryant and Bates, 2015, p. 17).

It has to be mentioned that, generally speaking, **educational services** offer a complex range of services, by combining *basic services* (e.g. traditional educational services) and *associated services* (e.g. online library), thus increasing competition between universities and the growing impact of the virtual environment on educational services.

In their study, the above-mentioned researchers demonstrated that online tools and methods may facilitate a social constructivist approach due to the fact that professors are trained for a virtual learning environment (Bryant and Bates, 2015, p. 17). They used Podcasting, Google documents and Facebook and also email feedback to an individual student to do their research.

Moreover, distance education has the power of bringing students and professors together in innovative and unique ways, even if it may create a great distance between the participants (Bryant and Bates, p. 22). However, using social networking sites is more and more widely used in higher education (Hamid *et al.*, 2015), even if students are concerned that their work becomes visible to others, which may be motivating, but challenging at the same time, with the risk of being copied by others, so they should be careful (Hamid *et al.*, 2015, p. 2).

From a different angle, **professor-student online social communication** has also become a research subject (Sarapin and Morris, 2015). They used multiple regressions to show that students' perceptions

augment favorably due to faculty participation in non-academic online interaction through Facebook due to the fact that it aligns professors' uses with students' expectations (Sarapin and Morris, 2015, p. 14). This may be due to the fact that 'as part of a social network, we transcend ourselves for good or ill, and become a part of something much larger', (Christakis and Fowler, 2009, p.30 in Selwyn, N., 2011, p.2).

3. Perceived quality of higher education – theoretical approach

The requirements of contemporary reality result from the ever-evolving technological process, and they are determined by education's adaptation in general, through its structure, objectives and content, to profound societal changes. Therefore, higher education institutions, by their continuous effort to adapt themselves at the market demands are facing a period marked by transition and transformation. Heyneman considered even since 2004 (in his article entitled "International Education Quality") that researchers' attention would shift to **the quality of higher education**. Education systems worldwide are normally divided in *elite education systems* and *mass education systems*.

Continuous improving of educational system quality is an integrative part of university management in countries all around the world. Universities are thus in fierce competition and try to differentiate themselves, in the eyes of the consumers, and the best way to do this is to provide *diversified services* and of *high quality* (Munthiu *et al.*, 2014, p. 1240), which have a great contribution to students' satisfaction and loyalty, as well as to universities' promotion and development.

The general quality of a higher education institution is determined by the quality of the instructional processes and of educational services, both traditional and online. Following the same line of thought, the right approach of **online services quality** means the **thorough analysis of students' needs, of their expectations and of their way of perceiving online educational services**. However, quality is also influenced by the way in which it is understood by the top management and by the professors, as persons who actually interact with students.

It should also be mentioned the characteristics of university clients and they way in which they are different from clients of other services. Therefore, for a university, the types of clients are the following: *students, parents, employers, alumni association, all contributors, the state and the society,*

which expects increasingly well-prepared graduates capable of augmenting the living standard (Kotler and Fox, 1995, p.20-22). This approach of “clients” of a higher education institution leads to *the adaptation of the offer of educational services* in order to satisfy everyone’s expectations, aspirations and needs.

The SERVQUAL model (created by Zeithaml, Parasuraman and Berry in 1988) applied to online educational services may generate the appearance of the following gaps: the gap between the university management perception concerning students’ online expectations and the quality specifications; the gap between quality specifications and the educational services performance in itself; the gap between the educational services performance in itself and what is communicated to students online; the gap between students’ expectations and actual perception of online educational services; the gap between students’ online expectations and their perception by the university management.

The last gap is composed in fact of the first four and it represents the defining characteristics of online educational services quality of a higher education institution.

All these aspects demonstrate the need of an increasing preoccupation of university management for transformations generated by the virtual environment on *students’ needs* and the development of activities having as objective the inclusion of the online component in educational services.

4. Students’ expectations and the need of innovating educational services

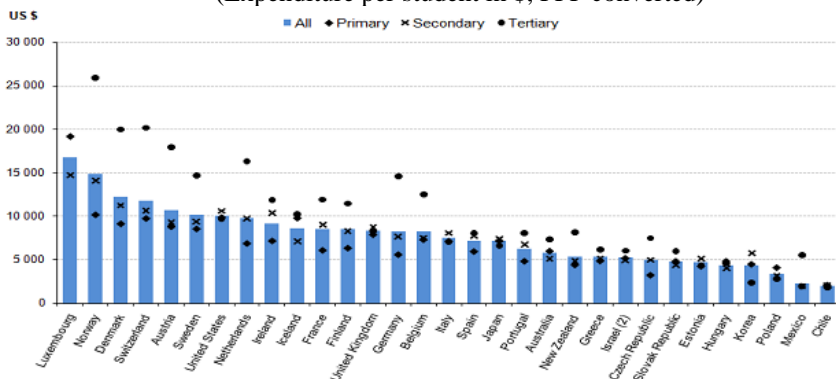
In nowadays’ highly industrialized economies, elite education systems do not exist anymore. In the last decades, superior education in highly industrialized societies represents more than 30% of the population and, in some cases, even 60% (USA, Canada and Sweden), but the growth tendency of higher education is universal. Between 1995 and 2000, higher education has augmented with 8% in Australia, 17% in Spain, 25% in Turkey, 40% in Coreea, 64 % in Hungary și 84% in Polond (OECD, 2001, in Heyneman, pp. 448-449). Moreover, in 2011 it reached 80%, according to the 2014 State of Higher Education published online by OECD in January 2015.

Average expenditure per student in OECD countries has been as average beyond 11,000 \$ in 2001, while in the USA it has been of 19,000 \$.

Turkey (4328 \$), Czeck Republic (5688 \$) and Mexico (4789\$) are situated below the average of OECD and USA expenditures (UNESCO, 2003, in Heyneman, p. 449). According to the Social Policy Division – Directorate of Employment, Labour and Social Affairs of OECD on public spending on education (2014), OECD countries spend on average around 7500 \$ per student on primary, secondary and tertiary education. However, it is also mentioned that the amount spend per student on tertiary education is more than 2.5 times the amount spent in primary education in countries such as Germany, Norway and Mexico.

Figure 2. Public expenditure on primary, secondary and tertiary education per student in 2011

(Expenditure per student in \$, PPP converted)



Source: OECD Education Database, 2014, and Eurostat Education Database, 2014

Countries ranked in descending order of spending per pupil for all education levels

Notes: Data for Luxembourg on tertiary education is unavailable. Data refers to 2010 for Greece

http://www.oecd.org/els/soc/PF1_2_Public_expenditure_education_Sep2014.pdf, p. 2, accessed the 7th of March 2016

At the same time, *expectations* referring to what higher education means are *in growth*. New fields of study, new teaching methods, and new online information sources are required in higher educations with the hope that they are competitive, even if expenses with higher education vary. **Students’ expectations** concerning *educational services in universities*, such as *courses’ quality, teaching methods and courses’ syllabuses* seem to have been

relatively stable in time. Telford and Masson (2005) showed that quality perception of educational services depends on students' expectations and beliefs. Voss *et al.* (2007) indicate more studies which suggest the positive strong impact of students' expectations and beliefs on variables such as: students' class participation, roles clarity and their motivation.

Relations between students and higher education institutions are thus much more complex than before. Nowadays, **students' expectations** are influenced by a *more and more competitive labour market* and with the demand of *LifeLong Learning*, which represent a whole series of opportunities and challenges for higher education institutions. The maintaining of this relation requires the change in the way of thinking and of learning. The passing from the old ways to new ways, new digital technologies and processes represents a distinctive sign of *innovation* services. Moreover, online social communication between student and professor using social media has been shown to augment **academic performance** and student **satisfaction** (Sarapin and Morris, 2015).

Services innovation refers to transformations in technological, societal and organizational level and in the demand of educational services in itself. Therefore, both the adoption and implementation of these innovations in higher education is still a competitive aspect, which contributes to the improvement of the process of information transmission and to students' positive perception and subsequent satisfaction with the whole educational proces. This also triggers the growth of the level of competition and of the market position. In order to respond to the continuous changes in the needs and wants of the market, universities aim at attracting as much students as possible, which may be interested in both traditional and online educational models. Therefore, higher education institutions may have a significant impact on the quality of life, which may be ameliorated through innovations, which represent a **change of paradigm**, from **traditional** to **innovative services** (Danjuma and Rasli, 2012) in order to enhance both teaching and learning by using **online education programmes** (Tomte *et al.*, 2015, p. 26.)

We have to mention that quality of educational services is a fundamental aspect for the development of any country due to the fact that it represents the essence of forming competent workforce, which, along with the abilities acquired and with excellent training, create value at their workplace and for their country. Universities have therefore the responsibility to provide

quality educational services for their students, which need a favourable study environment.

5. Conclusions and suggestions for further research

By orienting themselves towards perfection, it is necessary that higher education institutions pass through a process of continuous information, that they cultivate their Internet communication skills in order to provide professional training of professors and of students at the highest level possible (Tomte *et al.*, 2015).

In order to remain competitive, it is recommended that universities rectors / managers follow *three action and development directions* (Danjuma și Rasli, 2012):

- Firstly, it is necessary to align existent services to new clients and to new needs of already existing users of educational services, by giving them the guarantee of more accessible services or product that competitors do not possess at that moment. For example, the new systems of university taxes may be simplified and the sum due to be paid reduced.
- Secondly, institutions should be oriented towards innovations or towards using new facilities for new ways to satisfy needs. In this context, universities should integrate modern technologies, such as: last generation equipment, online technologies and any technological product which would simplify the process of information absorption, therefore winning an advantage in the attracting of new students.
- Last but not least, the final result of innovation in services should be a new method of organization of people, of technology and of processes in order to provide high quality services at reduced costs and in a quality university climate. The adoption of new facilities would help universities keep a step before competitors which refuse to respond to the needs of the new consumers and to satisfy requirements of current clients, requirements which appeared subsequently due to the fact that they refuse to change classical values which become or have already become inefficient and even outdated.

Following the same line of thought, it is recommended to research in the future on the improvements which may be done in higher educational

system concerning new methods (Tomte *at al.*, 2015, Bryant and Bates, 2015, Smrithi Rekha and Venkatapathy, 2015) and teaching models of online educational services.

Moreover, global economy finds itself in a very dynamic period, which strongly affects *services sector*, which is in *an ever-increasing growth* with each and every elapsed instant. *Higher educations institutions* may thus *significantly impact life quality*, which may be improved through *innovation implementation* and though a schift in paradigm *from traditional educational services to online educational services*, which tend to improve *users' general satisfaction degree*.

6. References

- Bitner, M. J.; Booms, B.; Mohr, L. A. (1994) Critical service encounters: the employee's viewpoint, *Journal of Marketing*, **58**, p. 95–106.
- Bryant, J.; Bates, A. J. (2015) Creating a constructivist online instructional environment, *TechTrends*, March/April 2015, 59 (2), p.17-23.
- Christakis, N. A.; Fowler, J. H. (2009) *Connected: The surprising power of our social networks and how they shape our lives*. Little, Brown.
- Clewes, D. (2003) A student-centred conceptual model of service quality in higher education, *Quality of Higher Education*, **9** (1), p. 69–85.
- Danjuma, I.; Rasli, A., (2012) Factors affecting service quality in Nigerian technological universities, *International Journal of Business and Management Tomorrow*, **2** (2), p. 1-11, ISSN: 2249-9962.
- Digital Agenda Scoreband (2013,2016), available at <https://ec.europa.eu/digital-single-market/en/download-scoreboard-reports>, accessed the 28th of February 2016
- Digital Single Market, Digital Economy and Society, provided by the European Commission, available at <https://ec.europa.eu/digital-single-market/>, accessed the 28th of February 2016
- Guolla, M. (1999) Assessing the teaching quality to student satisfaction relationship: applied customer satisfaction research in the classroom, *Journal of Marketing Theory and Practice*, **7** (3), p. 87–97.
- Hamid, S. *et al.* (2015) Understanding students' perceptions of the benefits of online social networking use for teaching and learning, *Internet and Higher Education*, 26 (2015), p. 1-9.
- Harvey, L.; Green, D. (1993) Defining quality. *Assessment and Evaluation of Higher Education*, **18** (1), p. 9–34.
- Heyneman, S.P. (2004). International Education Quality, *Economics of Education Review*, 23 (2004), p. 441-452.
- Kotler, Ph.; Fox, K. (1995) *Strategic Marketing for Educational Institutions*, Second Edition, Prentice-Hall.

- Munthiu, M. C. *et al.* (2014). Characteristics of educational services in the virtual environment, *Procedia – Social and Behavioral Sciences*, 109 (2014), p. 1237-2041.
- OECD Family Database, Social Policy Division – Directorate of Employment, Labour and Social Affairs, *Public spending on education*, p. 2, accessed the 7th of March 2016, available at: http://www.oecd.org/els/soc/PF1_2_Public_expenditure_education_Sep2014.pdf.
- Sarapin, S.H.; Morris, P.L. (2015) Faculty and Facebook friending: Instructor–student online social communication from the professor's perspective, *Internet and Higher Education*, 27 (2015), p. 14-23.
- Selwyn, N. (2011). Social Media in Higher Education, *The Europa World of Learning*, p. 1-10. ISBN 978-1-85743-620-4.
- Smrithi Rekha, V. ; Venkatapathy, S. (2015) Understanding the usage of Online Forums as Learning Platforms, *Procedia Computer Science*, 46 (2015), p. 499-506.
- Telford, R.; Masson, R. (2005) The congruence of quality values in higher education, *Qual Assur Educ*, 13 (2), p. 107–119.
- Tomte, C. *et al.*, (2015) Educating online student teachers to master professional digital competence: The TPACK-framework goes online, *Computers & Education*, 84 (2015), p. 26-35.
- Voss, R.; Gruber, T.; Szmigin, I. (2007) Service Quality in Higher Education: The Role of Student Expectations, *Journal of Business Research*, **60** (9), p. 949-959.
- Zeithaml, V.A.; Berry, L.; Parasuraman, A. (1988) Communication and control processes in the delivery of service quality, *Journal of Marketing*, **52** (2), p. 35-48.