

Are Still There Technophobic Professors and Student Computer Geeks in Romania?

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Abstract. This paper will focus on the use of computer systems as educational technologies and will try to show, on one hand, the fears of Professors and on the other hand the Students personal beliefs and perceptions about ICT. Despite a sufficient installed base of computers nowadays, very little of their potential to back up or support learning in Universities seems to have been realized. These attitudes towards the modern ICTs are very unlike. Even if lots of Professors are working in this environment they believe that they are not contributing to the learning process if they just use and try to find help in the support of the ICT use. However, Romanian ICT resources are quickly developing at the present time, namely, after the Revolution from 1989, but there still remains the question whether the teaching done by Romanian Professors using ICT is done in a way it actually aids the Romanian students, or the prospective job-seekers.

Keywords: ICT, modern technology, Romania, professor, phobia, student

1. Introduction

Any discussion about the use of Information Computer Technologies “ICT” in Higher Education is built upon the identification of the link between Universities, Learning, Information exchange, and Computer Technology. ICT can be an effective tool in supporting teaching and learning if it is used by a knowledgeable person. However, it is firmly established that its introduction into Universities does not by itself advance the excellence of teaching or raise achievement. Reassuringly, there is growing and widespread awareness that the pedagogical and technical expertise of the Professor is absolutely critical here. On the other hand, at the beginning, the prospective use of computers in Universities was first regarded with rather pessimistically; the principal conception was that Students would be ‘taught’ by computers in the near future. In a sense it was considered that the computer would ‘take-over’ the Teacher’s job in much the equal manner as a robot may” take over” a welder’s job. This rather grim image where Students sit alone with a computer, as their Professor, has till now proven wrong to some extent at least, or even more accurate, it has proven wrong in Romanian Educational Institutions. Nevertheless, as International Tests entered the Romanian Educational Market, tests such as TOEFL, IBT or BEC Computer Based tend to, step by step replace the Professor or not that drastically said, guide the student in a familiar language to him or her, and here we refer to the Computer Language.

Nonetheless there is an enormous dissimilarity between Professors who choose ICT resources to enrich the understanding of a specific topic, and those who choose resources purely to present Students, as Cox pointed out “work in a new way without any direct application to the topic. The evidence shows that when Professors use their pedagogical knowledge both of the subject and also of how Students understand and learn the subject, they can then maximize the effects of using ICT in terms of increasing Students” [1]

2. Geeks versus Technophobes

As a counterpoise to the knowledgeable young student, who feels at ease with the use of computers in schools, in Romania they are technophobic Professors, specifically, those who look at a computer and burst

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into an icy sweat, people for whom the term “Ethernet” or “PowerPoint-Presentation” carries obscure, gloomy implications or antagonism toward technological developments. Exactly as any other phobia, technophobia can cause anxiety and discomfort when a sufferer comes into contact with technology, such as computers. Besides this, there is another type of technophobe who may harbour feelings of unfriendliness toward the changes that technology has introduced into society, consequently into the Educational System.

In contrast, there are computer geeks among the Student community. According to Merriam-Webster Dictionary [2], a geek is an enthusiast or expert especially in a technological field or activity <computer *geek*> or a *geek* is a popular slang term that has been around in some form for over a century. In the 1920s, a geek was a freak show performer that swallowed bugs and other animals. Today, the word generally has a more positive connotation, used to refer to someone who has a great deal of specialized knowledge in a “geeky” field, such as technology or science.

In order to understand the rapid development and the fast introduction of computers in our daily life, it is very important to know that during the 1980s, worldwide, computers became more inexpensive to universities, allowing a speedy decrease in “Student to computer” ratios. While tutorials and manuals continued to be developed, a range of other didactic software was developed that was not based on the basis of Teacher replacement, for example, simulation software or modelling software. However, the most important argument used to add a benefit to the introduction of a bigger amount of computer hardware into colleges concerned the apparent essential to raise the level of computer literacy of Students.

On the way to the end of the 1980s and into the 1990s, while the computer literacy rationale still remained relatively low but then again was more worried with the requirement to use computers to improve Student learning. Broadly speaking, computer literacy is a component of “Technology” Education, which is distinct from using technologies such as computer systems to support learning and teaching processes. The last is in the main discussed to as educational technology; and is applied to a wide range of technologies such as blackboards and chalk, pencils, books, and slide-rules to television, facsimiles, and computers.

3. ICT Development and Romania

Parallel with what was happening around the world, earlier than the political changes at the end of 1989 nobody could speak of Internet in Romania. Romania became on 1st January 2007 member of the European Union, having a population of nearly 22 million and an area of 237.000 km² being the second largest country in Central and East Europe. Romania has always tried along its existence to keep an alert eye on the all the countries belonging to European Union, and not only, and from a geographical strategically point of view, it has and will have an important and significant influence in South East Europe. Moreover, Romania’s entry in EU also accelerates the process of improvement in ICT Literacy. Before the EU Enlargement-process took place, Romania tried to prepare the ground for the foreseen sudden Computer development, namely, after the abovementioned history regime changing Revolution from 1989, the approved connection to the internet took more than three years to enter into force, consequently, the domain “.ro” was official registered in February 1993. The beginnings were rather vague hard accessible to the grand public. After this step, Romanian Professors and students became gradually acquainted with the “newly” emerging ICT, as only from 1994 onwards the emergence of the “new” Information and Communication Technologies (ICTs) has brightly transformed theoretical and practical norms about the role of Professors, as communication technology was developing.

Since 2000 till at present, the role of the ICTs in developed and developing societies has become the subject of academic emphasis and exploration, regional and international seminars and conferences. Romania is no exception from the rule. As a consequence, at high-school level, the so called ‘informatics profile’ is quite common nowadays, including courses of Windows, Word and spread-sheet processing, Pascal or “C-Language” programming. Again to keep up with what was happening outside the Romanian borders and to prepare for what was to come after the EU integration, in February 1998, the Romanian Government implemented the national strategy for information technology and transition to the “ICT Society”, having as a central objective the improvement of the national information infrastructure. From 2001 a new centralised program called SEI was put in place, given that small networks and educational software entered into Romanian Higher Education.

Having looked upon the step by step Computer Technology emergence on the Romanian Market it is mandatory to state that not everybody was an open arms receiver of this sometimes overwhelming and time and space capturing never-ending progress. One of the biggest challenges and potential opportunities in Romanian Educational Society, if it can be called like that, is to win over most of the technophobes that unfortunately are among the Professors. According to some national surveys among Students and among Professors, a significant amount of Romanian Professors still deny that technology has revolutionized nowadays educational patterns and still do not “take advantage” of what great link Computer, namely Internet can be between a Professor and a Student.

A previous study done by the British Council [3] and the Galup Organization [4] of Romania in 2004 showed that in urban societies 97% of the students used computers and 95% used the Internet (43% in the universities, and 36% at home). Besides, 70% of the Internet users, in the age-bracket 15 to 35, used ICT to communicate, mainly via e-mail, 65% to learn, and 45% to search for study related information. As vital prerequisite it is essential to get a decent occupation, the ICT skills were classified third by 55% of respondents, subsequently the knowledge of foreign languages (65%), and the professional qualifications (54%). [5] As Nistor et al. already pointed out in their finding a weak spot could be; that only students are mentioned in this survey as they are considered to be the most frequent Computer users.

Nowadays, after the EU integration and after all the fast developed Computer related topics a quick survey in a room of 90 Romanian students show that most of them make use of the Internet, instead of University libraries, and especially to make their enquiries for semester papers. Even more than this, nowadays, at the university level in Romania most higher education institutes offer online courses, especially for students enrolled in distance education programs. Unfortunately, there are not enough publications presenting the evaluation of results of e-learning applications in Romanian Universities; however it could be a good starting point for future research and at the same time it could support Professors who started to get adjusted to the ICT use at University level and not only. To sound optimistic, there should be acknowledged the idea that there are some Professors who have dramatically adjusted their teaching methods in response to the new knowhow over the years. Among the young Professors, who are willing to keep themselves updated with what their students are already familiar with, the use and the help of Computers in their course started to become very often met. Nevertheless, if a computer is put in front of some more mature or more experienced Professors, to name them accordingly, some difficulties could be met, and here we do not talk only about the knowhow but unfortunately we talk about their openness and willingness to keep up with the fast developing world we all live in.

Preliminary theory on ICT adoption in educational background suggests that there are serious barriers to their use in all educational and socioeconomic areas, due to issues of infrastructure support, access to the ICTs, training and skills development, and hierarchical social relations which determine who has access to ICTs skills. Theoretically, this can be considered one of the reasons why such a scarce number of experienced Professors use Computer Technology in their Courses. In practice, according to the EUROSTAT [6] data released on the 27th May 2011, the number of Internet users has tripled in 2011, reaching 34% of Romanian population (around seven million), compared with the year 2004. There was a rapid increase as it was to be expected after Romania entered the European Union. According to the same source, in 11 years, namely from 2000 till 2011, in the European Union, Romania has the second highest percentage of Internet Users growth, after Latvia, with 873%. Again the theory above stated is overcome by practice and by real figures.

Having considered everything so far, it is obvious for some relevant questions to arise: who is part of this percentage? What age category has a higher rate? What is the ICT development impact on Higher Education, Professors and Students? In all the Romanian Academic environment subjects as the use of ICTs for interactive education, for pedagogy and for better managing the relationship between Professors and Students have been well debated and discussed. However, the interest which this subject awoke was more in the lines of the young Professors. It is really awkward and hard to explain but no official explanation was ever given, in Romanian Academic Environment, by the more mature Professors as to the reasons of not participating to the ICT based conferences. It was tacitly understood and nobody said or analysed into the matter. In order to find an off the record explanation we asked unofficially some mature Professors who gave

simple and targeted answers: “*I was busy writing for my next book*” or “*This was a conference just for you the young generation, it is too late for me.*” Surprisingly or not, this is part of the unrecognized reality that academically surrounds us here in Romania, or at least for the time being.

Everybody is well aware that at first technology was established to solve problems associated with human needs. If there is no problem to solve, technology or ICT is not adopted. Though, applying this principle to Romanian educational background would mean that Professors ought to build upon and adopt modern ICT. Supplementary, a technology will not be adopted by educators where there is no perceived need. However, the need should be first perceived and accepted as existing in order to take measures to meet that need. In some Romanian Academic environments there has been noticed some unrecognized panic if s/he (The Professor) has to use ICT in the classroom, especially, when the Students are almost always better self-educated, to use these utensils. What is more, very few Professors would believe using a computer, would necessarily increase the Students grades.

The Romanian society around us, Volens Nolens, comes to the help of the Academic ICT development, namely with the online applications which are of common use. Moreover, lately, Email is the preferred means of communication in many universities, used by the Secretarial Department to all the Professors, regardless of their age, thus, forcing them, unofficially to have an email account, and more important than that to check the email on a regular basis. Having an E-mail account for the Secretarial Department from the School s/he is teaching, it automatically became easier for the student to communicate with the Professor, as now the Professor just has to give the email to the student. Consequently, a link between Professor and Student was created without giving too much effort and without even stating out loud the final outcome – *ICT Professor Development*.

In the Romanian Academic Environment there is a vivid need for Professors to use new technologies to support curriculum enrichment, and to give *Fresh Colour* to their *Old Fashioned* lessons. As a consequence to this need and at the same time as a solution, in various Universities all across Romania, Internet based courses appeared. Some call them Distance Learning with the help of Internet, where students have all the courses online, easy available to them at any time and some futuristic Romanian Universities went a step forward and even hold online lectures in real time or post them online afterwards for those who attend this type of courses.

Regardless of the weaknesses in the previous suppositions, convincing ideas persist in Romanian Academic society for assuming that new communication skills hold the key to the development of many of the educational areas. For example, Professors, supporters of ICTs, point to how the Academic Western world experienced the waves of Professors and Student know-how and found it to be a crucial tool of expanding the branches related to education and communication between the world and the local Academic Environment, the Professor and the Student. The confidence is that if this development and advance of Western Academic Area actually happened, it should also boost our Romanian and Local Academic Environment. Consequently, the most important question arises: Do so called technophobic Professors, stop the Academic area from developing, especially if they feel threatened by Students, which some would be considered as Geeks in terms of ICT.

There are additional and important Professor related factors influencing the use of ICT in schools that turn out to be obvious, when one thinks about the technophobia of Professors against the much younger generation of Professors and Students, that already grew up with PC or MAC in their hands and as a result they are much more used and their users are more knowledgeable. This reason is considered to account for the most part of the ICT “II” literacy and confidence difference among Romanian Mature Professors and Romanian Young Professors and Students. These factors are considered in relation to practice; how and why Mature Professors use so little ICT in their teaching. As educational factors including levels of Professors own ICT education and literacy rates, and access to professional ICT development play an important role. Indeed many Romanian studies indicate that it is Professors’ ICT attitudes, proficiency, absence of self-government and lack of acquaintance to evaluate the use and role of ICT in teaching or technophobia that are the noticeable factors that hold back Professors’ readiness and confidence in using ICT support in their classes. Some Romanian Professors tend to find an excuse in the idea that there is also a wide-ranging insufficiency of learning resources, course curricula and other learning materials that incorporate ICT use.

While it is assumed computers support for learning is essential, some discussion of the rationale is required as a background to later discussions concerning models for the use of computing systems to support learning and teaching.

In contrast, more important seems the lack of incentives and support for Professors are other elements delaying their use of ICT. Professors actively take part in cooperative schemes and often portray constructivist pedagogy. Nevertheless, the Ministries of Education offer very little funding and few incentives to use the technology successfully. National policies need to make more commitment to helping Professors effectively integrate computers and internet technologies into the classroom by aligning curricula, exams, and incentives with the educational outcomes that they hope to gain. At the end of the day, ICT by itself convey very little extra to the educational method; they are only tools for teaching and learning.

4. Conclusion

As a conclusion on one hand, the use of ICT in Romania's Higher Education is able to trigger positive effects towards students learning skills, on the other hand professors also need to keep up with the pace of ICT development and not only be familiar with the names of the newest word processing software or web browser. For that reason we presented in this paper the local situation regarding the ICT use in Romania's higher education, and gave some insights in a small sample population of Students and Professors of Vasile Goldiș Western University of Arad. Nevertheless a more thorough research into this topic might alter or confirm these findings.

5. References

- [1] Cox, M. et al. (2003). *ICT and Pedagogy: A Review of the Research Literature*. London: Department for Education and Skills.
- [2] <http://www.merriam-webster.com/dictionary/geek> accessed 1st of December 2011
- [3] <http://www.britishcouncil.org/ro/romania.htm> accessed 1st of December 2011
- [4] <http://eu.gallup.com/home.aspx> accessed 1st of December 2011
- [5] Nistor, N. et al. (2005) "E-Learning in Romanian universities: Dealing with essential changes of society and culture", a chapter into "E-Learning in Europe - Learning Europe" (eds.: C. Schwarz, et al.), volume 35 of "Medien in der Wissenschaft", Waxmann Verlag (Münster, New York, München. Berlin)
- [6] http://appsso.eurostat.ec.europa.eu/nui/show.do?wai=true&dataset=isoc_ci_ifp_fu accessed 1st of December 2011