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**IS BLENDED LEARNING A NEW WAY TO AN OPTIMAL ADULT  
EDUCATION?**

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**Abstract**

In actual stage of the mankind, the concept of the lifelong learning is a reality of the knowledge based society because this satisfies the new needs for its complex dynamics of evolution, of transformation, of development, etc. In this framework, almost all the crafts, jobs, professions, business, social services, etc. are continuously adapting to the demands of the new human society based on “computer”. By the “computer” we understand all the things and human activities which are made by /or with a computer, starting with the human common communications, through e-mail, Skype, WhatsApp, etc., till the sophisticated artificial intelligences which helps mankind: to do better the things, to understand in the same time the “big” and the “little” Universe through learning. In this frame of the need of learning, it seems that the blended learning is gaining ground like a new educational paradigm which fulfils this need. Starting from a recent experience linked with a designed activity based on the blended learning technologies for reformulating a training plan of lifelong learning, which is supposed to give the school manager's competencies, dedicated for the teachers from the pre-university education system, if they will want to candidate at this position, this work is dedicated to some reflections about what is and what will become higher education in framework of the blended learning paradigm.

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## 1. Introduction

The Knowledge-based Society (KBS) naturally brought a new reformulation or a re-conceptualisation of education, which basically means that the formal education is going to adaptation to this “new society”. In those countries where KBS had an evolution based on the support of a real development and implementation of the informational society (IS), the formal education, in general, the educational system, in particular, have been adjusted, connected, harmonised with the requirements, the needs and the new forms of the information and communication technology (ICT).

Any trainer/teacher/educator, at any level of the formal education or any other type of education, in order to be able to apply and use a new educational technology, e.g. type ICT, he had learn first so he can understand and apply accurately these in the educational environment for a concrete reality, i.e. for his students. In this context, even us want to learn in order to do better our activities of teaching in the class or in the front of the computer, for the students. In other words, we want to understand how a child/student/adult must be educated by using newest pedagogical method which is blended learning (BL).

So, first we have to understand what is that new education technology BL. Following a desk research of literature to be honest not deep enough like in Güzer & Caner (2014) or Fish & Snodgrass (a, 2015), we found a first approach of the concept of BL. It is a very well explained approach in the context of the conversation theory, within the researches from the University of Salford, (Heinz & Procter, 2004), in which the learning "is facilitated by the effective combination of different modes of delivery, models of teaching and styles of learning, and founded on transparent communication amongst all parties involved with a course." In fact, Heinz (2008) goes deeper with the research in the BL conceptualisation within the pedagogy, the teaching and learning theories etc. Heinz, starting from the unanimous accepted definition that “blended learning is the delivery of teaching/learning through the combination of online and face-to-face interaction resulting in improved student learning”, reaches its next reformulation: “blended e-learning refers to the learning which takes place through a combination of face-to-face facilitated learning, e-learning and self-study”. Moreover, it can be said that the results of research from the University of Salford in the direction of BL are valuable and have led to many applications in various fields of activity (Heinz & Procter, 2010). Obviously, this definition is based on the concept of e-Learning, which is one of the "older" concepts of the education on/ or with a computer.

If we assume that “e-Learning is learning utilizing electronic technologies to access educational curriculum outside of a traditional classroom, and in most cases, it refers to a course, program or degree delivered completely online” (para. 1), then we are in the non-formal domain of education . In the formal education the e-Learning concept is not quite unanimously defined yet. “The origins of the term e-Learning is not certain, although it is suggested that the term most likely originated during the 1980’s, within the similar time frame of another delivery mode online learning. While some authors explicitly define e-Learning, others imply a specific definition or view of e-Learning in their article. These definitions materialize, some through conflicting views of other definitions, and some just by simply comparing defining characteristics with other existing terms.” (Moore, Dickson-Dean & Galyen, 2011). In the landscape of the Romanian pedagogy, e-Learning is defined, in broad sense, as “all learning situations in which use significant resources information technology and communication” or, in a narrow

sense, as “a type of distance education, the experience planned for teaching-learning organized by an institution that provides mediated materials in a sequential order and logic to be assimilated by students in their own way.” (para. 2). Not the last, e-learning is linked to distance learning, which is another complex sort of education.

So many issues still remain unresolved in this case, especially those things related to education at university level in the first place. We think and believe that a simplistic approach of blended learning technologies by some universities only for sake of the facilitates of the cost reductions and economical benefits, through a reducing to the maximum of all teaching activities in the face-to-face mode, either in class or online, is a great mistake. Moreover, if at the internationally academic level, there are still great confusions of terminology concern BL “philosophy”, then we need to think seriously on responses to the following questions: “What education shouldn’t be?” and “Does it do that well?” (van de Werfhost, 2014). Last but not least, in the process of globalization we have to analyse everything we've done so far and compare with objectives stated and assumed by some that govern education at the international level (ONU, UNESCO, ICED, etc.), to see if the strategies already implemented till now have led to their achievement and, consequently, decreased or resolved, at least in part, "the world crisis in education" (Coombs, 1968, 1985).

The research for the applications of the BL technologies in the educational system have revealed the complexity of this new form of education, and, in plus, put in evidence that the role of the trainer is not lost, on the contrary, it increases. The relationships between teacher-student, student-student, knowledge-teacher-student, etc. must be redefined in the virtual environment. All these relationships will be beyond human nature in a such new educational environment? ... “After all, what do we know about cultural perceptions about online education now?” (Fish & Snodgrass, b, 2015). But, what do we know about effects of the blended learning in the future?

## **2. Internet-based Scholar Context**

Ever since the school was considered a state institution, it was designed as an optimal environment of learning for the students such that they are forming to become “useful” citizens for the society. In time, however, this institution, by its curriculum and its theories of instruction, fulfils more and more less its primordial mission, and, today, it is actually felt by its students who accuse it, among other things, of a de-contextualisation of the learning that is “pushing” them in a rift between “the reality that they learn” and “the reality of the real world” in which they live.

Therefore, today, the main challenge for the formal education is re-contextualisation of learning, and the return of its educational institutions in the community for solving the requirements which this asks for, i.e. in everyday reality of life. Students must feel that what they learn is in fact the reality in which they live and to embrace knowledge, as purpose of education. Within this paper, we have no intention to approach the theories about non-formal or informal learning, promoted more or less, by certain political and economical interest centres, like the best solutions for the “world education crisis”. We might do that some other time, maybe. It is certain that the loyal supporters of the formal school went from purely pedagogical arguments to a reformulation and adaptation of learning in the context of new computerised technology of our society based on knowledge. And this is very good!

From our point of view, the essential novelty of the current world education is the “higher speed” with which the informations is propagated amongst all the members of the human society, i.e. children, young and adults people from everywhere. If the Gutenberg’s printing house represented a crucial moment in the development of circulation and spreading of the information from the all kind domains, cultural, scientific, political, economical, etc., than the internet brought a new revolution for the circulation of information with such effects and implications that we can not be able to quantify yet them for the upcoming development of the human society on a planetary scale. In that context, the educational system realized that it must adapt its mission to these requirements. So, one of the challenges for the formal education system is to adapt to the new trends of the real life, to unfold the knowledge in the new learning methods, techniques, strategies, etc., and to approach other forms of perception, construction for the teaching knowledge, especially with the help of educational computerized systems. By computerized systems we understand not only the computer, whether as a “window” to communication, by e-mail, net, I-phone, as well as the virtual libraries, but also the learning platforms, web-learning, etc. and other educational applications which support the students to obtain the competences to learn to do, to know and to become human being.

One of the examples of the adaptation of the education system at the real world is the distance education, which has a long history spread on almost two centuries. It was started with basic correspondence through postal service to the wide variety of tools available through the Internet, and now it is also called the Web-based learning. From this point of view, the learning technology for these kind of education and its associated fields continue to evolve, practitioners and researchers have yet to agree on common definitions and terminologies (Moore, Dickson-Dean & Galyen, 2011). What are the principles benefits of the distance learning based on the online didactic communication? First of all, the costs for the students’ transport from the their homes to the school is not necessary, and all other necessary costs for the school building and its suppliants are zero. So remain only the costs for the trainers and for their work online with the students, and for the maintenance of the e-Learning platforms and the network, which are the proprieties of a certain educational unit.

### **3. Blended Learning “Face-to-Face” with the Education from the Kindergarten Till the Universities?**

Today, within the educational activities, ever since nursery, they use multimedia type presentations. Those should ensure, by complementaries and integration in the teaching-learning-evaluation processes, the development of the whole personality for the student, while facilitating workloads targeting group activity and require collaboration and cooperation, providing authentic learning contexts, from the real world, easy to simulate even in the classical context of a class of students. But the most important change in the learning context (the contents) for the student is moving from the artificial, unreal environment (virtual), to the real world environment through new information technologies.

In fact, the skills we expect the student to acquire must ensure its socio-professional integration, even if he gets a job in the IT field. One cannot be a good IT person if one does not know the reality for which you create software that should resolve, optimize and govern the specific process. Without a correct knowledge of a process, whatever area of the human activity it belongs to, one cannot develop an expert informational system. However, that is another major issue for of the educational system, that we do not

intend to discuss within this paper. If the printing paradigm imposed only alphabetization in the sense of reading and writing in the native language, in a worldwide circulation language or in mathematics language (these are the main pillars of every international programs for the evaluation of educational systems), the internet paradigm imposes a new alphabetization adequate to the new technologies for the information processing and communication (ICT). It is a must to be familiarized with the educational environment connected to ICT and that imposes a broader meaning to the alphabetization concept. One might find an urgent need for a new form of alphabetization based on ICT that includes three homologous components to the classical ones, which are Reading, Writing and Numeracy. So, the new “Reading” implies the capacity to look for and find information by investigating different written sources, by observation, experiment and data gathering. It implies proficiency in the use of search engines, in utilizing search functions and selection of information made available by new information technologies and communication. The internet offers a huge quantity of information, but, unlike a library, does not have a catalogue and we cannot be certain the information we discover are correct. In order to publish a book that will end up in a library afterwards, it is necessary to be read by another three to four people, editors, reviewers, publishers, beside its author. The information posted on internet is not endorsed by any reviewer’s commission. The information exists, it is important to know how to look it up and how to appreciate its relevancy and authenticity.

The new “Writing” implies the capacity to communicate in hypermedia evolving all the information types and resources. The ability to utilize an e-mail account (electronic post), to communicate virtually through instant messaging type Irc, to post a subject in a forum, to continue or propose a blog (electronic diary), all of these represent tangible “writing” methods in hypermedia. The new "Numeracy" implies the ability to design and make various objects and actions in cyberspace. It is a superior skill related to the ability to utilize software resources that enable the possibility to virtual modelling of objects or phenomena in order to make them more accessible for students. There are software programs that simulate phenomena and physics laws, thermodynamics or chemistry laws, some being used successfully in schools through programs from the Ministry of Education (de example: AEL).

In consequence, we are obliged to rebuild drastically the educational contents and the didactical strategies to meet the challenge of new alphabetization. New literacy alters our way of relating to reality. It obliges us to search for new ways to understand and represent reality. The formal school is obligated to commit all these new tasks and to take them to be solved in the KBW context, but it should provide a high quality of education, ensuring the reduction of social inequalities, eliminating the discriminations, etc. (Duru-Bell, 2004).

Any child or student, whether he/she will become a student at an university or he/she will follow a vocational path, he/she must have a job, and his/her employing institution will put again him/her to learn and, of course, using a computer in an undoubted way. So, he/she must have ICT competencies. After all, the continuum learning/lifelong learning/etc. at the work place so the “workers” become better at there jobs are not a new thing on the Earth! But the computer brought the possibilities to “save” the money, time, distances, etc. for the companies, for the state, etc. It is only one aspect amongst other sides of the new world. Indeed, today we speak about optimization, cost effectiveness, competitiveness, quality, etc. for almost all human activities, even for the child’s “education”. It is good? It will be better? It will be worth? Who knows?

### **3.1. After all, What is Blended Learning?**

At this question there are many answers and these are not a bit satisfactory for all researchers in “charge” today. But, we think that all come via corporative policies as IBM and other like it. So, from this point of view, the blended learning solutions are a great way to initiate an organization into “e-learning manufacture of best employees involved in its business” (Driscoll, 2002), and this is accomplished by: “to combine or mix modes of web-based technology (e.g., live virtual classroom, self-paced instruction, collaborative learning, streaming video, audio, and text) to accomplish an educational goal; to combine various pedagogical approaches (e.g., constructivism, behaviourism, cognitivism) to produce an optimal learning outcome with or without instructional technology; to combine any form of instructional technology (e.g., videotape, CD-ROM, web-based training, film) with face-to-face instructor-led training; to mix or combine instructional technology with actual job tasks in order to create a harmonious effect of learning and working.” In short, the companies will do everything to obtain an optimal for the company itself and its customers, with the employees which are trained in a short time and with minimum financial resources.

For the university level these things are not so quite easy to do (Hamilton & Friesen, 2013; Poon, 2013). Even if we accept that BL is a “convergence of face-to-face settings, which are characterized by synchronous and human interaction, with ICT based settings, which are asynchronous, text based, and involve humans operating independently” (Graham, 2006) or it is "the thoughtful fusion of face-to-face and online learning experiences" (Garrison & Vaughan, 2008), we should not stop only at this idea about BL. Because BL “should not simply be considered in terms of delivery and technology”, “it must be as much about varying learning methodology as it is about training delivery”, and the “technology should be considered merely as a means to facilitate student learning” (Sloman, 2007). In short, the BL is a complex combination of two conceptual fields, i.e education field and technology field. These fields have each one its dynamics, but they are interdependent: through the education we obtain new technology, and through new technology we develop the knowledge, so the education. From this point of view, the pedagogical triangle, knowledge-teacher-student must be reformulated. It may be necessary to introduce the ICT technology like a bridge between the triangle tops. Both the teacher and the student use of ICT technologies. The teacher uses these technologies to design the student's learning activities, according to the curriculum, the student uses ICT technology to learn, to self-assessment, and to communicate with his teacher for telling him about his learning acquisitions and his future needs of learning. In fact, in the context of the blended learning theory and reformulating, it is very important to reformulate the teacher's role because he is the one which assumes the design of all learning activities for the student, and also he assesses the student's achievements. (Hamilton & Friesen, 2013; Friesen, 2012; Kahan, 2012; Bonk & Graham, 2005).

### **3.2. A Short Story about an our Blended Learning Experience**

The Muntenia Continuous Training Department (DFCM) from the University of Pitesti has an important experience in organizing training for the didactic personnel from the pre-university education system in many directions required by its needs. About this experience and about the achievements of this department we wrote before (Nicolescu & Macarie, 2013; Nicolescu, Macarie & Petrescu, 2015). During

a several academic years (2016-2015), the continuum training program for manager skills competencies for the teachers from the pre-university education system, which are going to accede to the position of manager of a school or the school inspectorate, has been organized online. That program was a real success for DFCM, recognised by its graduates, as well as by scholar inspectorates and by National Education Ministry (NEM). If we had to characterize briefly the organization type of that continuing education program for adults, then the best choice would be by “the brick and mortar class” which has spread over all the country, and it has been supervised by the “building engineers” (the trainer), which was placed far away from it. In this online environment learning, we were able to apply all Khan’s dimensions of the orthogonal framework for the design of a blended learning (Singh, 2003): institutional, pedagogical, technological, interface design, evaluation, management, resource support, and ethical. And do not forget that we thought that we did only an online continuum program for the adults, in particular, for the teachers, and we did not know that, in fact, we were doing a blended learning program for them!

Since 2015-2016 academic year, the NEM imposed us to organize these continuum training programs in blending learning system. What did it bring new for us? A few things: the continuum program for the teachers must be shorter and must contain two or three hours of “face-to-face”, and in rest, the students ought to learn on the e-platform, where they could find the course supports, the tests for the self-evaluation and the guide books for the elaboration of the portfolio or project. The final evaluation of the students remains the same: a dissertation on the school management, that contained a punctual application for a specific situation in which the author really works as teacher.

In the two ways of organization for this continuous training course, we find the following common aspects:

1. For the trainers the advantages appear once the content of the taught discipline is finalized, once the course support is uploaded on the online platform, with the content of applications, exercises, tests or homework and portfolios required. Each trainer can communicate directly, audio and video, with each student or with their group at specific times presented in the course schedule. Also, he can comment on each homework seeing its written support, which can also be viewed by each trainee, who received it previously. The trainers can verify the homework given to the trainees, the time they spent on it, the number of time one accessed the platform, the way they evolve in time.
2. The students formed their own study/learning group where they worked together and defined their needs for the next online meeting with the teacher.
3. For the continuous training program type Blended Learning administrator the online platform represents the amount of information regarding the quantity and the quality of didactic activities, or concerning the evolution of the trainees. That information is useful in order to attain the objectives of the training program and that is to obtain by all the trainees of the necessary skills imposed by the accreditation of that program.
4. For the network administrator, who controls the whole program and has total access to all the activities from the online platform, all the information and findings are useful in order to ensure a safe and secure functioning of the program.

What were the differences between the two ways:

1. If in the online system, the students had to come to the *Muntenia* Centre only once, at the end of the course to present their dissertation, in the second mode, the BL mode, they had to be present twice,

first for the face-to-face activity, at Pitesti, and second at the end of the program. Because the people from the Ministry could not understand that the face-to-face activity could also be done on Skype, the costs for the students raised.

2. The number of hours for the interaction with the teacher online were drastically reduced in favour of the e-platform learning ones, that is the individual learning hours for the students. The students noticed that. This observation is correct. The trainees, teachers with experience in their own specific didactical activities, cannot understand so easily concepts of systemic dynamic management, accountancy and educational unit government concepts, etc. So, it is not easy to learn by your self using e-platform no matter how well the courses are structured and how much information one can find on internet about one subject.

The quality of a post-university program must be ensured from the designing stage. In particular the quality of a management training program for education is ensured when the program curriculum is designed, by knowing the management general rules, the functions and the role of an organization manager. The study disciplines, the number of hours in the “face to “face” system and the numbers of hours spent on the online platform must be balanced, in order to gain maximum training efficiency, with a minimum of travelling for the trainees, to reduce expenses necessary for their training. That combination of opposed requirements is difficult to solve, because there is no certain method for it. What is to be done to attain maximum efficiency in obtaining real skills by trainees at the end of an educational management program? The answer is not easy to find or indicate, but we will give you a few certain directions to achieve that. The trainer has a huge responsibility when designing and conceiving a course support that is to be sent to trainees. The trainer must know the accredited training plan, what skills should be obtained by a trainee enrolled in the program and think by which the trainee can complete or obtain one or more of the necessary skills by going through the course support and its applications.

Knowing all that and having the accreditation for training adults on online platforms as well, the trainer will know exactly what to do when designing the best course support in order to attain the wanted goal. Without such information and accreditations, a trainer cannot obtain maximum efficiency in the program activities. Furthermore an efficient trainer must show a lot of availability and empathy to its trainees, considering their professional and personal responsibilities. A huge responsibility has the program administrator too, as he is the person who designs and conceives the training program. One accredited, the training program must be followed up, step by step, in order to intervene efficiently if “non-conformities” appear. How “non-conformities” could appear?

They show up due to unintentional mistakes on behalf of the trainers, or due to unintentional or intentional mistakes on behalf of the trainees. When the program administrator observes such “non-conformities”, he must intervene firmly to solve them eliminating its causes, through individual or group discussions. A certain method to reduce or eliminate “non-conformities” is to discuss informally, either face-to-face or on the online platform, with the trainers as well as with the trainees, throughout the whole program. The final evaluation questions set for the training program, given to the trainees helps the program administrator to correct eventual “non-conformities” noticed by the trainees.

#### **4. What are We to Conclude?**

Generally valid conclusions are difficult to have. But, from our experience we have learned something. This shows us that when those who have the power to govern, on an unclear and woolly law, the national education system, they can confuse things already done well in system.

Under the umbrella of new ideas coming through UE directives, with direct reference to the Bologna Convention for education, in Romania was adopted the new National Education Law (law 1/2011). This law wanted to align the education levels from Romania with the European standards. Intentions were good, but these were written in a disastrous juridical language. The Law1/2011 introduces considerable confusions between licentiate/masters/doctoral levels and the initial university education/continuum education/adult education/lifelong education/adult education levels. In this chaotic context, it is no wonder that in Romania who endorse or accredit the continuum training plans cannot understand the concept of the face-to-face activities, and more, the BL concept. They make grave confusion between the educational management and the management of an educational unit. In other words, at the high level of management of the national educational system there is confusion between a teacher face to a class and a school manager, who may be a teacher.

Regarding blended learning paradigm, we think that there are many things on which we must reflect and examine them. Obvious, the human nature has not changed, only the man's knowledge evolved and will evolve through education. It is less important if we design his learning by mixing it with pictures/books/maps/computer/etc., as long the man will be able to learn for knowing and understanding the world in which he lives, together many others like him, on a little planet, which is "immersed" in an infinite universe. Among "the laws of the world" there are found, transcribed in mathematical language, for example, Pythagoras' theorem and Kolmogormov's backward equation. If we can learn the first law on a site, i.e. in the blending learning style, for the second law is so hard to learn in such way. Learning problem is actually mixed in a strange way. We ask some rhetorical questions: The formal education must be interesting only by the needs of a company/business which is in top for now? The curriculum for the formal education must eliminates all the knowledge about the basic laws of the world because such kind of needs? If the answer is "yes", than it can be arranged, because it is possible by "twisting the virtual world on the computer in the global internet network". But what is the gain? Only money and success today for some of us? But tomorrow? How many people will be able to do scientific research work around the future world? Only a few? How many? For whom will they be working?

These are only some questions. If the student does not learn Pythagoras theorem in the classroom from his mathematics teacher and he still wants to learn it, than the teacher does not know his student and his needs for to learn. This is a very important and serious problem for the formal education. This thing should not be happening any more, because tomorrow there will not be a future for all of us. After all, the school exists for the students and their future.

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