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# **PREPARING THE WORKFORCE FOR THE INFORMATION SOCIETY**

Lucrări ale celei de-a treia  
Conferințe Internaționale de Educație a Adulților, Iași, 25-29 aprilie, 2010



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## ARGUMENTUM

LAURENȚIU ȘOITU<sup>1</sup>

When I participated to a presentation of a Ph.D. thesis, I told the student that she would still work in 2050, underlining that she would do many things in her starting career! What I didn't say then was that no one could know how the students and the Ph.D. thesis would be in the future. I accepted the idea that I have warned the auditorium about the unexpected and unforeseeable evolution of our past student. After that I remembered the process of writing of my first Ph.D. thesis, with an army of typists who were very astonished by the fact that I was capable of dictating words like *meaning*, *sense*, *semantics* and *semasiologic*, when they knew others, real and tangible ones. Meantime much more appreciated machines have been invented, with independent memory – my second Ph.D. thesis had the support of the computer with discs, something different from the future floppy discs! The correction was made on each word, letter and syllable – there was no need to modify the whole page! The professor who coordinated my first Ph.D. thesis could be astonished by what happened in just 15 years. Even the fatal fatigue of my first thesis coordinator was determined by the correction of one volume written by the old machine.

How will we write – if such an operation is still going to exist – after fifteen, twenty five, thirty or fifty years? Who will write? The typist is gone, even the author became lazy – he or she has different instruments to record his/her voice. A professor said with irony that it was better if the school taught us just to read. In this case many works had not been published. The time will come when the incapacity to write will be a reality. The writing will be performed by the technologies waiting to be discovered! The only thing they still need is a soft for copy/plagiarism, capable to erase all which is not worth to be remembered!

Such a *program for erasing* extended to all new and old media could liberate us from the electronic and physical *waste*. I have already a feeling of liberation, brought by all the free spaces in which the great works could easily travel in their full beauty. In this space every one could enjoy the purity of the thought, without the weight and the danger of easily assuming the work of others! Of course I'm found of Noica<sup>2</sup> who said that no matter how many things have been said about

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<sup>2</sup> Constantin Noica, 1973, *Creație și frumos în rostirea românească*, Editura Eminescu, București.

something, everyone has the chance to say something *a little different* if this something is really his/her.

In the field of practical occupations, as they were named, it is also difficult to say how things will be in the future. About ten years ago a lathe man still needed a good physical condition to work and many of the people who worked in this field couldn't imagine their activities in the present conditions.

So, returning to professions, I discovered how astonished I was when I read an essay about the present-day role of the school, in which the author revealed his scepticism about the capacity of an old institution to address the needs of the students. The idea that students need a good qualification is continued with the question "what for?" and we discover that answering "to be better than the others" is not good because the employer doesn't look for something like that. The employee is "accredited" for a specific function at the level of the firm. This is why he/she is requested to know to use a computer, to be willing to be assisted and even lead in the management of his activities.

Nevertheless they will be those who will create the new computers, their programs, they will be the creators of the new great inventions... They will create the new reality... they will give the new meanings to the being and the act of being... Of course we are capable of recognizing our wishes and our dreams as well as those pointed to the others. But, one day<sup>3</sup>, almost ten years ago, a group of students were presented in a movie, all standing in the face of the computer, capable of discussing about everything, even about a beautiful woman who was not present, sending messages to one another. It didn't matter that only one of them saw the woman, even seeing her was irrelevant, they continued to chat about her, lacking the enthusiasm for the actual presence of their subject of admiration.

I was very surprised when I discovered in Rene Berger<sup>4</sup> the importance of the photo, considered by the parents even more important than the real image of the child. The photos were always in the possession of the adults, next to the pocket money and credit cards. In the meantime, the presentation of the child to the group of friends<sup>5</sup> and acquaintances becomes more and more rare, the simple image on a piece of photograph paper being enough. The evolution was from paper support to film, than to the digital, which made possible to compose a film with the same

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<sup>3</sup> 2003, Romania, Agigea, European Summer Academy, *Metamorphoses* – after Ovidiu's poem title.

<sup>4</sup> René Berger, 1978, *Mutația semnelor*, Editura Meridiane, București.

<sup>5</sup> It is a clear sign of the separation between parents and children, leaving the world of children being considered mandatory for their free manifestation. In a further step in *Second Life* the spaces reserved to children and teenagers would be completely forbidden to the adults.

length as the time spend with the interlocutor. The passage to the *Second Life* was almost natural. If anyone could take anywhere anybody's image, then why not take any appearance we want, why not use known *avatars*, having the maximum liberty to choose a star – regardless its sex – an animal, a bird, a plant or any combination between the existing or the imaginary ones. The ostrich-camel of Dimitrie Cantemir<sup>6</sup> is an innocent construction compared to what can be now designed or accepted!

The avatars<sup>7</sup> are not unwanted or unexpected anymore; they are searched, selected, constructed and reconstructed based on some established objectives, subordinated to some precise goals with strategies that are centred on the relationship between the (auto) creator and the public. In this way, the predominance of the avatars in the companies, embassies, museums, libraries, churches, universities<sup>8</sup>, hospitals and supermarkets can be explained. *Second Life* has newspapers, television and fashion magazines which characterize a world that respects itself in its tri-dimensional virtuality. A virtual world constructed on wishes, ephemeral fantasies of the human being who escapes from itself, voluntarily participating and abandoning itself to this alienation process from which we don't know how it will escape.

Avoiding any comments about this strange field for the adult generation, we'll come back to the avatar of the companies, capable and even more interested in the virtual space than in the real one. The reason is simple: from an economic perspective it is better to offer the ideas/projects to the potential beneficiaries first, than to invest and at the end find out what they desired. In this way we can explain why there are virtual projects first and only later they become real, why the idea to simultaneously develop some economic actions in both spaces is not abandoned, why the virtual space itself brings profit after everybody finds out about its benefits.

And still, the child from mother's photo is coming back! In a certain context, a television manager doesn't assume the effects of his shows, considering that every spectator can choose from different media offers. The business man forgets that all the other shows are made respecting the same rules and format, that he is just doing the same thing like all the others. On the other hand, the choice is made by the one who can, who chose in the past and who has criteria for his options! The child, the

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<sup>6</sup> Dimitrie Cantemir, *Istoria ieroglifică*, Editura Gramar, Bucuresti, 2008.

<sup>7</sup> a. Name given by the Hindu to successive reincarnations; b. transformation, unpredicted and painful metamorphosis, in the evolution of a being.

<sup>8</sup> During CIEA the HOF symposium will take place, where Gary Miller, Marcie Boucouvalas and Carol Kasworm will debate the possibilities, roles and effects of the universities in the new stage of the informational society.

teenager or the adult who was not educated to analyze, to differentiate and to succeed in using rules and criteria, is not capable to make value judgements. Defending the right to choose of the child, we cannot forget the right to learn and to offer values. The boundaries imposed by parents believing that in this way they will have more liberty were doubled by those capable to obtain profit from using the lack of parents' attention, and tripled by the children themselves encouraged and even forced by the adults' indifference that created the *Second Life*, in which each generation, group of interest and individual can isolate itself.

We cannot forget that in the same time with Rene Berger's work, Alvin Tofler's<sup>9</sup> *The Third Wave* appeared. The latter warns us that in the post-industrial society something from the organizational structure of the industrial one is kept – everybody has a chief! – the difference being that everyone is capable to become chief for the others too! Now every one of us can listen, follow, execute commands, make suggestions and recommendations, and even can report what he/she understood and realised to someone he/she never met in reality.

Alvin Tofler had the intuition of future development tendencies, even if at that moment he didn't know about that space in which the human being could manifest. If the author had no reason to be afraid that somebody could become his own chief, now the situation is different. The new chief can be anybody, can come from anywhere, can be born suddenly from a previously inexistent motivation and from somebody's bet who decided to invest in some gifted minds. The task of the chief doesn't require any remarkable qualification, any special responsibility<sup>10</sup>. How is the new chief's responsibility obtained? What is this responsibility? Is it the economic one? The technological performance one<sup>11</sup>? The persuasive, manipulative one?

The artists' shouts, saying something that remained unnoticed or passed right next to us, accompanied the history. The playwright Victor Ion Popa<sup>12</sup> discovered in the typing machine a way in which people could address to more than a single

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<sup>9</sup> Alvin Tofler, *Al treilea Val*, Editura Politică, București.

<sup>10</sup> The question about the power of the school is of more and more actuality because in our society we witness the generalisation of promotions made by those having the power, thinking that any chief will be helped, on one hand by all the others, and on the other hand by the entire new technology dominated by pre-established programs.

<sup>11</sup> In the day of the first Moon landing mission UNESCO sent a telegram to NASA, congratulating them and addressing the subject of *education*, of how this achievement should be presented. It was important to know who could travel through spaces that were to that day reserved to God! If we speak of rights without norms, without laws, than no one can guarantee about the future behaviors and attitudes!

<sup>12</sup> Victor Ion Popa, *Tache, Ianche și Cadâr*, Editura Univers, 1972.

person. The saddest and most profound fragment of the play is when the two parents confronted the letters received from their children after believing that each of them was receiving the most beautiful one only to find out that they were identical! Great was their suffering when they understood that the message of their correspondents was lacking the strictly personalized element, being replaced by one suitable for both fathers.

How do messages, send almost simultaneously to large groups of people, look now? Even waiting for a personal message, written especially for us or a specific person – parent, lover or friend, seems pointless.

Orson Wels<sup>13</sup>, terrified by what radio could make of Hitler, who created his political image of a man capable of manipulating the present or even absent crowds, put into scene the radio scenario transmitted on October 31, 1938. His message wasn't understood and it created a disaster among the listeners incapable to discern between real and fiction. This new instrument continued to be used in propaganda since then. The television on its turn showed its power and effects in 1989, when it became an instrument that helped the Central and Eastern Europe to modify its political structure and its boundaries. The demolition of the Berlin Wall, the revolution from Romania and the other countries, the recent history of Yugoslavia, couldn't be possible without the presence of the television capable to transmit live images from all around the world.

We now have another proof: the *Avatar*<sup>14</sup> movie. This can be another signal, a hopeless call of the human being who wants to escape from his real world. The new technologies allowed the construction of this alarm signal. The psychologists discovered an accentuated depressive state of the people who have just left from the show; not even they could explain their feelings! The movie shows what humans can destroy and how good can be another world, one unimaginable, constructed from the wishes of some beings that have feelings and reactions we lost.

Regarding the creation of human beings, it is well known that from the religious point of view they were created after the image of God – and so an obligation not to imagine other past or future beings was imposed! Once that axiom was established, it remains the question of the resemblance with God! The answer is: the resemblance is obtained with a lot of work and zeal! So, the perfection is a gift for humans but it can be obtain only by those who will not despair in a world

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<sup>13</sup> The radio scenery *The War of the Worlds*, that became the movie *The Night America Trembled*.

<sup>14</sup> *Avatar* is the first film for the big screen of James Cameron after the most profitable movie of all times, *Titanic*.

governed by limited time. Of course abandoning the god image we can forget and definitely abandon *the need of resemblance!* After changing the image, anyone can wish everything without being responsible in the face of others, without privately or publically recognising his/her desires.

When Constantin Noica<sup>15</sup> lectured at our university he was asked how his belief in the meaning of the human being can resist when there are so many predictions about the end of the world. Free of any polemic, the philosopher discovered the great pride of those who, even in such situation, as last survivors, could say *we lived as humans!*

The technologies don't necessary bring the alienation, but can generate the oblivion of self – no matter the place in which the human being is: at home, at work, in the nature that he/she doesn't understand.

The producer of a (still) SF movie presents the struggle and the insubordination of a intelligent robot, capable to have self will, in its desire to have a human child. The robot understood that the immortality is just for the human being and not for the machine, no matter how complex it is. We still desire the instance performance of the robot. We build close systems, standards; we refuse the long periods and we accept and serve the moment no matter what. We speak about maximum efficiency obtained with minimal efforts, about business results and we obsessively refer to personal and group objectives, we concern about everything and forget about all! But we are all ONE, the human being!

Plato, Parmenides and Christian philosophy, monotheist philosophies, constructivism and positive conceptions, all are reunited in the CIEA papers. They include subjects from activity restructuration projects at any level and field, to interrogations about the place of the human being in the world of new technologies.

We thank you for your contributions to the conference volume.

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<sup>15</sup> In a 70's conference, Aula Magna, „Alexandru Ioan Cuza” University, Iași.

## **GENERAL TOPICS**





## **ADULT EDUCATION WITHIN THE FRAMEWORK OF LIFELONG LEARNING – INTERRELATED DEVELOPMENTS IN GERMANY AND EUROPE ON THE ROAD TO CONFINTEA**

HERIBERT HINZEN<sup>1</sup>

### *Abstract*

The sector of adult education and learning has been receiving greater attention and recognition within the framework of lifelong learning, an area which has meanwhile become a major paradigm in the theory and practice of education, particularly within the context of global, regional, and national institutions such as UNESCO, the European Union, or the German Adult Education Association (DVV). The policies, programmes, approaches, and even funding procedures of organizations at all three levels have significant bearing on one another. The following article examines the upsurge of interaction in the field of adult education over the past few years in anticipation of the next World Conference on Adult Education - CONFINTEA VI.

### **Introduction**

In the light of contemporary documents and conferences on lifelong learning, and with reference to selected adult education organizations and professional adult educators and scholars, this paper is an attempt to illustrate the trend of mutual exchange which especially in recent years has been gaining momentum and strength in the adult education sector. In a lively exchange of ideas, concepts, and approaches, players in the field are in the process of leveraging synergies across national and international borders in theoretical perspectives and practical experience.

While collecting material for this contribution, I came across two particularly interesting articles. One, written by Wolfgang Seitter, looks at the international dimension of German adult education from the perspective of internationality as a 'horizon of reference'. In his article, Seitter states, “concisely postulated, it may be said that throughout its formative years German adult education concerned itself with foreign models, concepts, and institutions, fostering an international focus,

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<sup>1</sup> Prof.(H) Dr. Dr. h. c.(H) Heribert Hinzen is the Director of dvv international, the Institute for International Cooperation of the German Adult Education Association. He is a member of the CONFINTEA VI Consultative Group, the UN Literacy Decade Expert Group, and the Higher Education Reference Group on Education for All. He represented DVV in the German UNESCO Commission, and is currently a Vice President of the International Council for Adult Education (ICAE). E-mail: hinzen@dvv-international.de

systematically to an extent, through personal and academic contacts.” For the period between 1890 and 1930, Seitter cites university extension in the UK, residential folk high schools in Denmark, and public libraries in the USA as models for adult education centres (*Volkshochschulen*) and public libraries (*Volksbüchereien*) in Germany. He then goes on to state, “between the years 1960 and 1975, in a process of modernization and professionalisation within the framework of educational reform, adult education developed into an international programme that incorporated key concepts such as lifelong learning, recurrent education or *éducation permanente*. It was UNESCO and the Organization for Economic Co-operation and Development (OECD) which played the decisive role in introducing these concepts into the debate based on arguments relating to the economics and democracy of education.”<sup>2</sup>

The second article, written by Joachim H. Knoll, presents a history of the UNESCO world conferences on adult education (from Elsinore through Hamburg, 1949-1997).<sup>3</sup> This article contains a wealth of information on the development over time of educational concepts in theory and policy, and the individuals and organizations which were instrumental in bringing these concepts to the forefront of the adult education arena. Joachim Knoll is one of the few scholars in the field in a position to compile a contemporary history of adult education which he not only experienced first hand but also had a decisive role in shaping.

Paul Bélanger is another such personage. During a session of the CONFINTEA VI Consultative Group in June 2008 he pointed out that in 1960 he participated in his first UNESCO World Conference in Montreal and has not missed a World Conference since. His role is a prominent one especially considering that in the 1990s, as director of the UNESCO Institute for Lifelong Learning in Hamburg, he was the architect of the last and hitherto largest of these conferences, CONFINTEA V in 1997. Since the year 2000, when he returned to Canada to assume a professorship at the Adult Education Faculty of the University of Québec in Montreal, Paul Bélanger has served as president of the International Council of Adult Education (ICAE).

The present analysis does not attempt to cover such a long span of history. Its scope is confined only to the past three years. The object here is to illustrate the

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<sup>2</sup> Seitter, W., 2000, *Geschichte der Erwachsenenbildung. Eine Einführung. [History of Adult Education. An Introduction]* Bielefeld. Bertelsmann, p. 108.

<sup>3</sup> Knoll, Joachim H. 2008. *Zur Geschichte der UNESCO-Weltkonferenzen für Erwachsenenbildung – von Helsingör (1949) bis Hamburg (1997) [On the History of the UNESCO World Conferences on Adult Education – from Elsinore (1949) through Hamburg (1997)]*. In *Bildung und Erziehung*, pp. 129-149.

influence exerted on national developments by European policy, especially as promoted by the European Union (EU), and perhaps vice versa as well. The discussion will consider developments in Germany by way of example, and will explore how these developments figured in the preparation of the coming UNESCO World Conference on adult education – CONFINTEA VI in Brazil. The focus will be on the Pan-European Preparatory Conference in Hungary as a case in point.

The analysis will follow a step-by-step retrospect in reverse order of time, beginning with the most recent function to which comparatively closer attention will be paid.

### **UNESCO: The Pan-European CONFINTEA VI Preparatory Conference in Budapest (December 2008)**

Every 12 years, UNESCO calls on the governments of its member states to participate in an International World Conference on Adult Education. In 1997, the conference took place at Hamburg under the designation CONFINTEA V, an acronym derived from the French title of the conference series “Conférence Internationale sur l'Éducation des Adultes”. The conference concluded with the adoption of two documents which are still worth reading today: the “Hamburg Declaration on Adult Learning” and the “Agenda for the Future”. The Hamburg *Volkshochschule* and the DVV were both actively involved in the organization of the conference. Professor Dr. Rita Süßmuth, who was elected to preside over the World Conference, helped lead the often complicated negotiations to a successful conclusion. Many of the DVV's partners took part in the conference. The official CONFINTEA V website under the following internet address is a valuable source of information and well worth a visit

<http://www.unesco.org/education/uie/confintea/documents.html>

Concrete preparations for CONFINTEA VI began in 2007. The UNESCO Institute for Lifelong Learning (UIL) in Hamburg set up an international preparatory committee to plan and organize the various steps leading up to the big event. Some of the main stages in the process included the drafting of the Global Report on Adult Learning and Education (GRALE) and the organization and implementation of a series of regional preparatory conferences. CONFINTEA VI, which is being organized under the motto “Living and Learning for a Viable Future – The Power of Adult Learning” was originally scheduled to take place during May of 2009 in Belém, Brazil, and has meanwhile been postponed until December 2009. Further details and extensive background information can be accessed at the

official conference web pages under the following internet address: <http://www.unesco.org/en/confintea>.

The Pan-European Preparatory Conference for CONFINTEA VI, covering the UNESCO region of Europe, North America, and Israel, was held in Hungary from 3 to 5 December 2008. Under the “Regulations for the general classification of various categories of meetings convened by UNESCO”, CONFINTEA falls under Category II, making it a so-called 'Intergovernmental Meeting' subject to reporting requirements. The documents which must be submitted, including national reports and particularly the final declaration of the conference itself, are binding in nature. Delegations to the meeting in Hungary came from 33 countries and included representatives of civil society as well as experts from the field. The German delegation, which was headed by Mr. Oliver S. Lübke from the Federal Ministry of Education and Research, comprised 10 persons, including Ms. Ulla Burchardt from the German Parliament, as well as representatives of the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany (the *Kultusministerkonferenz* KMK), the Confederation of German Trade Unions (the *Deutsche Gewerkschaftsbund* DGB), the Association of German Chambers of Industry and Commerce (the *Deutsche Industrie- und Handelskammertag e.V.* DIHK) and the German Commission for UNESCO (*Deutsche UNESCO Kommission e.V.* DUK). The keynote address was delivered by the DVV's president, Professor Dr. Rita Süßmuth. Professor Dieter Timmermann, Chairman of the Expert Commission on 'Financing Lifelong Learning' which was convened by the Federal Ministry of Education and Research, gave a presentation at the plenary session on a variety of different financing options. Heribert Hinzen was appointed to the editorial committee responsible for elaborating the final conference declaration. As an organization accredited by UNESCO, *dvv international* was able to send a delegation of its own. In addition to Uwe Gartenschlaeger, the Institute's deputy director, and Professor Joachim H. Knoll, who is on the Institute's Board of Trustees, many of the Institute's project directors were also actively involved in the conference proceedings.

The final conference declaration was published under the title the “Pan-European Statement on Adult Learning for Equity and Inclusion in the Context of Mobility and Competition”. Following are a few quotes from that document which are particularly relevant to policy, legislation, and financing of adult education. The abbreviation ALE in the text stands for "Adult Learning and Education", which has come to be used in the field is a comprehensive term encompassing all aspects of formal, non-formal and informal learning throughout adulthood.

5. ALE has a critical role in responding to these economic, social, cultural, political and educational challenges and since CONFINTEA V there have been

sizeable gains for ALE on a number of fronts. Both the EU and the OECD recognize the centrality of lifelong learning...Policies on ALE exist in virtually in every country of the region...

7. The existing frameworks and thus the capacity of ALE to respond to the challenges...vary across the region. In all but a small number of countries, the response has been primarily vocational education and training for growth and competitiveness. However, the overwhelming view of the Conference is that there is a need for a more integrated approach that addresses economic development, social cohesion, equity and diversity, democratic citizenship, sustainable development and community and personal development...

8. Policies, structures and measures to assure the quality of learning should be developed..."

11. Governance issues should be addressed with a view to creating the local, regional and national frameworks, structures and partnerships – including public authorities, social partners and civil society – essential for the development, coordination, funding, provision, quality management and monitoring of ALE. The involvement of civil society in policy development, policy implementation and governance should be particularly promoted and supported...

12. Robust public funding is key to the development of ALE, which is vital to the public and private interest. In many countries the financing of vocational, and particular, non-vocational adult education is not sufficient.

13. Funding should include public sources with support from national, regional, and local level, as well as multi-stakeholder contributions from the private sector and the individual. Under-represented groups need particular financial support. Timely and effective investments in ALE could prevent the higher social costs of unemployment or marginalization.

14. New financing mechanisms should be put in place to stimulate individual and collective participation and investment by enterprises...

18. Learning outcomes wherever, whenever and however achieved should be recognized and validated. This should take place within the context of coherent sub-national and / or national systems...

(The document can be accessed in its entirety at the UNESCO webpage cited above.)

It was the structural issues relating to policy, legislation, and finance in particular that prompted intense debate in the various working groups. This was true above all in the committee responsible for drafting the final declaration. It was not possible, for instance, to find consensus among committee members on the provision in the original draft calling for 'core public funding' in adult education.

Reservations were voiced especially by representatives from countries which bank on liberal market strategies.

An important aspect about the document are the multiple references the document contains to global developments, not only to the current financial and economic crisis and its implications for the provision of social services and education, but also to the obligation which the Pan-European region has to support the regions of the world more seriously affected by these developments.

“There is need too for the Pan-European region to recognize its responsibility to act as a partner for the development of ALE in the rest of the world. The significance of North-South partnerships is stressed, since they enable mutual learning and aid to be directed to fulfil the EFA goals and ensure the importance of ALE in pursuing the Millennium Development Goals is recognized.”

In preparation for the conference, a remarkable document containing an excellent overview of the field was compiled by Helen Keogh, Chairperson of Dóchas, the network of Ireland's development NGOs, under the title “Adult Learning and Education in the UNESCO Region of Europe, North America and Israel”. The first two chapters of this paper describe how ALE is regulated and financed. The document draws on the national reports which were compiled according to a common grid designed by the CONFINTEA VI Consultative Group, and submitted to UNESCO as background information on the developments in adult learning and education since CONFINTEA V. More than 160 such reports have meanwhile been submitted, and can be accessed at the above-cited UNESCO website. Synthesizing all these reports was not an easy task, but neither was compiling the data in the first place. For each separate country it involved identifying the processes of adult education and compiling the results which then had to be organized according to the stipulated guidelines and presented in a uniform format to facilitate comparability.

In Germany the country report was put together under the auspices of the Federal Ministry for Education and Research (BMBF) and the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany (KMK). The German Institute for Adult Education (*Deutsches Institut für Erwachsenenbildung* DIE) was commissioned to draft the report with the active participation of relevant German adult education organisations and experts. The person in charge of writing the report was Susanne Lattke. The task involved detailed discussions with relevant organisations and experts to determine their expectations from CONFINTEA VI and obtain an accurate picture of the current situation in theory and practice in the field of adult education. Policy developments needed to be explored and areas calling for action

had to be identified. A workshop was held by the German Commission for UNESCO (DUK) to facilitate the process of preparing the report.

The result is impressive. Available in both German and English in a single volume containing more than 250 pages, the document is entitled "Leben and Lernen für eine lebenswerte Zukunft – die Kraft der Erwachsenenbildung. CONFINTEA VI-Bericht Deutschland / The Development and State of the Art of Adult Learning and Education (ALE) – National Report of Germany". It can be accessed as a pdf file from the Ministry's website at

<http://www.bmbf.de/de/1366.php>

Important topics addressed in this report include legal and political framework conditions, issues of organisation and competent authority, finance, provision and enrolment, quality assurance and benchmarks, research and staff development. This authoritative reference work is a significant contribution to a better informed international debate.

### **Education Summit in Dresden (October 2008) DVV's Position Paper**

Political debate on the implementation of a comprehensive system of lifelong learning in the Federal Republic of Germany has become more intense in recent years. Increasingly, more and better education at all levels is held to be of vital importance in order to successfully cope with the challenges posed by the economic situation. This was the central issue at the Education Summit "Qualification Initiative for Germany – Advancement through Education" which brought together German Chancellor Angela Merkel and the prime ministers of the Federal States. A new catchword made the rounds with Chancellor Merkel's call for Germany to become an "Education Republic".

Through a number of initiatives organized in connection with summit, the German Adult Education Association (DVV) took the opportunity to make itself heard. The position paper issued by DVV for the occasion (which can be accessed at [http://www.dvv-international.de/files/neu\\_positionspapierdvvbildungsgipfeleng.pdf](http://www.dvv-international.de/files/neu_positionspapierdvvbildungsgipfeleng.pdf)) stressed that "continuing education and learning throughout life must play a key role" in the process of building Germany into an Education Republic. Calling attention to the effects of globalisation and rapid technological change, it points out how crucial learning is to improve chances for people to obtain employment and participate in society and states that "the fundamental importance of continuing education for individual advancement as well as for the economic and social development of Germany has long been scientifically established beyond dispute."

In a section of concrete demands entitled “Urgent Tasks” the position paper calls upon the government to strengthen the adult education sector in the interest of learners and in line with European and international cornerstones of lifelong learning. Among other things, specific claims are asserted for:

1. “Second chance” through continuing education...

It must be made bindingly possible for every adult – independent of income – to access literacy measures and attend programmes leading to primary, secondary, tertiary and vocational level certification

2. More education support for people over 30

Germany needs a transparent, goal-oriented and consistent financing system for continuing education that addresses in particular the needs and capacities of educationally disadvantaged groups and men and women in the second half of their working lives....

4. Access for all

The concept of lifelong learning for everyone can only be realized if the Federal, Länder and local governments acknowledge a public responsibility to ensure a comprehensive system of education that provides open and universal access to affordable opportunities for general, political, cultural and vocational continuing education. The desire to continue learning should not be thwarted by financial considerations in any sector of the population....

5. Six percent of the education budget for adult education

Within the framework of EU policy on the promotion of lifelong learning (from the Memorandum on Lifelong Learning, 2000 to Action Plan, 2007) the European Union recognizes continuing education as an invaluable field of education in its own right. The future funding of continuing education in Germany must be oriented to European developments and international benchmarks. The target is to appropriate 6% of the entire national education budget for continuing education - including literacy and basic education programmes... Such an investment might even make it possible to reach the target set by the United Nations Literacy Decade and to halve the number of (functional) illiterates by the year 2015...

7. Creation of a reliable framework for continuing education

In the interest of the quality and attractiveness of continuing education, it will be necessary for the Federal, Länder and local governments to agree on standards and a binding framework analogous to the education standards set for the formal school system. Among the factors requiring regulation are guaranteed access, quality assurance and development, certification (also of informally acquired skills) as well as the time requirements of learning...

For now at least we have to be content with the opportunity that events such as this Education Summit offer us to focus public attention on continuing education's



justified claims for political action. But we are far from accomplishing even our most modest objectives. Dr. Peter Faulstich, Professor of Adult Education at the University of Hamburg, and for many years President of the German Association for University Continuing and Distance Education, expressed his disappointment in the event, characterizing it as more of a “mole-hill” than an education summit. (cf. <http://www.bildungsspiegel.de/aktuelles/bildungsgipfel-ein-maulwurfhuegel.html> )

### **The Council of the European Union: Conclusions of 22 May 2008 on Adult Learning**

In the preamble of the EU Council's “Conclusions of 22 May 2008 on Adult Learning”, comprehensive reference is made to earlier European Union proclamations which had significant bearing on the development of a system of adult education in the context of lifelong learning. The declaration begins by citing the Lisbon European Council Conclusions which spell out the intention to create a high-performance educational system capable of converting the European Union into the most modern economy in the world (and consequently the most competitive). And it concludes by calling attention to the most recent statements on the European Qualifications Framework (EQF), to the need for a unified framework for adult education indicators and benchmarks, and to the importance of developing European instruments to identify and validate informal and non-formal learning achievements.

So far only partial success has been achieved on the difficult road toward upgrading the qualifications of low-skilled workers, reducing the high rate of early school leavers, and remedying the deficits of elementary schooling, all of which are basic prerequisites for bringing about social inclusion, widening participation and enhancing employability. In this respect, the following demands of the Council are the logical consequence:

1. adult learning should be given stronger emphasis and more effective support at national level, as part of overall efforts to develop a culture of lifelong learning;

...

5. the cross-sectoral nature, diversity, complexity and richness of adult learning impose the need for an integrated approach involving all stakeholders, including those at local and regional level, the social partners and NGOs.”

In the final section of the Conclusions, the European Council expressly invites the EU Commission to

- “pursue and intensify cooperation with the international organisations and relevant non-governmental bodies working in this field” and to “establish

links with ... worldwide initiatives such as 'Education for All' and the Millennium Development Goals.”

The annex to the Conclusions puts it upon the Member States to

- “endeavour to ensure an adequate share for adult learning when allocating financial resources across the various educational sectors, in line with a lifelong learning approach.”<sup>4</sup>

### **German Ministry of Education and Research Concept of Lifelong Learning (May 2008)**

A government position paper on lifelong learning (*"Konzeption der Bundesregierung zum Lernen im Lebenslauf"*) was presented on 6 May 2008 by the Federal Ministry for Education and Research (BMBF) to the German Parliamentary Committee "Education, Research and Technology Assessment" of the German Parliament chaired by Ms. Ulla Burchardt.

The paper is based on the recommendations presented by the "Committee on Innovation in Continuing Training" which was convened by the Ministry. DVV was represented on the Committee by Professor Dr. Rita Süßmuth and Professor Klaus Meisel. In the first paragraphs, the paper states:

- "Lifelong learning is one of the biggest political and societal challenges facing Germany. The realization of lifelong learning is decisive for the prospects of the individual, the success of industry and the future of society... Globalization and the knowledge society are confronting people with great challenges which are made even more demanding as a result of demographic change. Lifelong learning must serve to continuously adapt and expand knowledge and the ability to apply the knowledge acquired."

Pointing out that learning enables people to enhance their employability and exercise their civic duty, and that it is also a crucial factor for integrating people with an immigration background into German society, the paper calls for the systematic improvement of continuing education schemes and the development of measures to increase participation in continuing education programmes by widening the range of programmes and measures. The paper does not leave any illusions about the fact that the strategies it describes require additional funding:

- "These objectives call for considerable effort on the part of all those involved in financing continuing education to mobilize resources above and beyond funding mechanisms that already exist. The responsibility of

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<sup>4</sup> Council of the European Union: Council Conclusions of 22 May 2008 on adult learning (2008/C 140/09). *Official Journal of the European Union*, 6 June 2008.

enterprises for the continued training of their employees must be clearly emphasized in this connection. Employers should be encouraged to step up their commitment toward financing continuing education. The same applies for unions and employers' associations, the so-called 'social partners,' and their responsibility to provide further training for employees.”<sup>5</sup>

A key objective is to increase participation in formal continuing education (courses and seminars) in the 25 to 64 years age bracket from the current level of 43% to 50% by the year 2015. Special efforts will be required in particular to reach people with low qualifications, considering the under-representation of this group in continuing education programmes.

The concept outlines a number of concrete strategies with suggestions on how to implement them. Many of the proposed measures involve improved financing schemes designed to create a wide variety of incentives and mechanisms that will facilitate access to continuing education and further training. Approaches include the concept of a continuing education voucher (*Bildungsprämie*), "time accounts" for learning (*Lernzeitkonten*), grants oriented to career advancement (*Aufstiegsstipendien*); and adopting legislation to promote further training geared to advancement (*Aufstiegsfortbildungsförderungsgesetz* - AFBG). Improved educational counselling is also stressed as a crucial element in the successful implementation of the proposed measures.

(for additional information see [www.bmbf.de](http://www.bmbf.de) )

The debate surrounding the means of financing adult education as part of lifelong learning was amplified in a parliamentary hearing on the topic “Lifelong Learning – Need and Funding” held in January 2007 by the German Parliamentary Committee “Education, Research and Technology Assessment”. Questions no. 20 and 21 in the list of issues on which the hearing, which dealt with the potential of an Adult Education Promotion Act (*Erwachsenenbildungsförderungsgesetz*) and the legally defined right to continuing education focused, gave the DVV an excellent opportunity to advocate the need to subsidize infrastructure development

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<sup>5</sup> BMBF: Konzeption der Bundesregierung zum Lernen im Lebenslauf. Deutscher Bundestag. Ausschuss für Bildung, Forschung und Technikfolgenabschätzung. A-Drs. 16(18)353. Eingang am 6.5.2008 [German Ministry for Education and Research. The Federal Government Concept for Lifelong Learning. German Parliamentary Committee on Education, Research and Technology Assessment. Circular 16(19)353 issued on 6 May 2008].

not only in the school system, but also in Germany's system of community adult education centres, the *Volkshochschulen*.<sup>6</sup>

**EU Commission Action Plan on Adult Learning (September 2007) and the Communication "Adult learning: It is never too late to learn"(October 2006)**

In 2000 the Directorate General "Education and Culture" of the European Commission published the "Memorandum on Lifelong Learning" which was very widely circulated throughout the European Union and is still well-worth reading today. Upon issuing the document, the Commission opened a consultation process which elicited thousands of replies. In 2001, after reviewing all the comments it received, the Commission issued a follow-up communication entitled "Making a European area of Lifelong Learning a reality", quoting the following Chinese proverb on the title page: "When planning for a year, plant corn. When planning for a decade, plant trees. When planning for life, train and educate people." For more detailed information see [http://europa.eu/index\\_en.htm](http://europa.eu/index_en.htm)

This process made an important contribution to the growing perception of adult education as a decentralized system of universally available learning opportunities covering general education and citizenship education which is designed to enhance employability and organized close to the people through local learning centres. It helped to rekindle recognition for our good old four-pillar model of education (school, vocational training, higher education and adult education), even though in the wake of the PISA results more attention has been paid to improving permeability between the different education sectors and to the promotion of non-formal and informal learning.

The importance of adult education as part of lifelong learning is highlighted in a more recent policy paper issued by the European Commission. The Communication "Adult Education: It is never too late to learn"<sup>7</sup> stresses five key policy areas where intervention is necessary:

- Lifting the barriers to participation
- Ensuring the quality of adult learning
- Recognition and validation of learning outcomes

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<sup>6</sup> DVV: Lifelong Learning – Need and Funding. Answers to questions for the hearing of 29 January 2007, Committee for Education Research and the Implications of Technology, German Parliament, A-Drs. 16(18) 144. In: Adult Education and Development, 68, 2007, pp. 123-140.

<sup>7</sup> European Parliament resolution of 16 January 2008 on adult learning: It is never too late to learn [2007/ 2114(INI)].

- Investing in the ageing population and migrants
- Indicators and benchmarks

The specific nature of adult education in the context of lifelong learning is spelled out in the document. The aim of the Communication is to outline a perspective for the educational policy of the Commission and the Member States and. The follow-up document entitled “Action Plan on Adult Learning. It is always a good time to learn”<sup>8</sup> translates this perspective into a concrete plan of action. The consultation process leading up to this document emphasized three key, strongly interconnected elements:

- the policies adopted to meet the needs and demands of society and the economy;
- the structures for governance including the quality, efficiency and accountability of the adult learning system; and
- the delivery systems including learning activities, learning support and recognition of learning outcomes which address the motivation and learning needs of learners in the context of the needs and demands of society and the economy.

The Communication proceeds with an invitation to the Member States and the Commission to participate in the Action Plan. Outlining five strategic lines of action, it urges them to

- analyse the effects of reforms in all sectors of education and training in Member States on adult learning;
- improve the quality of provision in the adult learning sector;
- increase the possibilities for adults to go 'one step up' - to achieve a qualification at least one level higher than before;
- speed up the process of assessment of skills and social competences and having them validated and recognised in terms of learning outcomes;
- improve mechanisms to monitor the adult learning sector.

The position of DVV in this process was clear:

“We expect national education policy at Federal, Land and local level to recognise the value of a nationwide professional adult education system that has been so

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<sup>8</sup> European Commission: Action Plan on Adult Learning. It is always a good time to learn. Communication from the Commission to the Council, the European Parliament, The European Economic and Social Committee and the Committee of the Regions. Brussels, 27 September 2007, [COM (2007) 558 final].

heavily stressed by the EU, and to strengthen and expand continuing education as a fourth pillar of the education system”.<sup>9</sup>

The Communication was elaborated parallel to a number of studies which originally had been intended to serve as its starting point. In retrospect, at least from the perspective of the European Association for the Education of Adults (EAEA), this arrangement had the advantage of allowing the various groups to work fruitfully side-by-side and to a degree even in close cooperation with one another.

The final document passed through a total of four drafts reflecting thoughtful consideration by the EC officials in charge in consultation with the EAEA and taking into account the results of the studies with all their related discussions. There is no denying that the process was a fertile one for all concerned. From the opening statement of the Communication, the message is clear: “Adult learning is a key and vital component of lifelong learning”. This is the type of endorsement we hope to find in German policy statements at the federal, state, city, and community level.

#### **EAEA Study “Adult Education Trends and Issues in Europe” (August 2006)**

Core policy statements are customarily prepared on the basis of studies. For the policy statement on adult learning, the European Commission launched several studies through a tender procedure. “Adult education issues and trends in Europe” was the theme of one study that was of particular interest to the European Association for the Education of Adults (EAEA), along with another study, the object of which was to compile information on the most relevant providers of adult education in the countries of Europe. EAEA assumed the role of lead agency of the consortium that won the first of these two studies. Janos Toth, then president of EAEA, served as team leader. For the second study, EAEA formed a partnership with several professionals from the field. Professor Joachim Knoll cooperated as an independent expert. Susanne Lattke was appointed to represent the German Institute for Adult Education (DIE), and Heribert Hinzen, then a vice president of EAEA, represented the DVV.

Studies of this nature normally have a very tight budget with respect to time and money. As a rule, however, the pressure resulting from limited resources is

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<sup>9</sup> Towards the European Adult Education Action Plan “It is always a good time to learn”, Declaration by the General Assembly of the DVV on the occasion of the German Presidency of the EU Council, [www.dvv-international.de](http://www.dvv-international.de)

compensated for by the relevance of the finished product and a degree of dedication hardly conceivable in retrospect. Barely six months were available to complete the study from the date it was commissioned until its termination. And indeed, the result is presentable. Publication of the original English version of the report was made possible through an EU grant. The text can be accessed at the website of EAEA ([www.eaea.org](http://www.eaea.org)) together with a wide range of other documents.<sup>10</sup>

The study examined the situation of educational policy, legislation, and financing of adult education. It explored reasons for non-participation, and strategies for facilitating participation. It discussed basic skills and key qualifications, dealt with issues of certification and accreditation, shed light on the quality of training and retraining, and looked at the greater picture of adult education under considerations of demography and migration. In addition to a large number of conclusions and recommendations, the final chapter names five key aspects that require implementation and support:

- A holistic – total, integrated, systemic and all-embracing grasp and policy perspective on adult learning and the resulting provision.
- Core public funding, especially for the disadvantaged, with a stable and sustainable locally based infrastructure.
- High quality of provision and quality of the personnel involved.
- Recognition and credit for non-formal and informal alongside formal adult education and learning.
- Simple key indicators, together with support for and use of good research and statistics.

The study, which was translated into a variety of languages and distributed on a large scale internationally, has received widespread acclaim.

### **Prospects**

It has been the object of this paper to concentrate on a number of significant developments that have taken place in the field of adult education within a relatively short span of time. The issues left to deal with are many: In what ways has the paradigm of lifelong learning had an impact on society? What place is accorded adult education in the context of lifelong learning? What significance is attached to the structures of adult education? What adult education strategies are being debated within the “magical triangle” framework of policy, legislation, and

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<sup>10</sup> EAEA: Adult Education Trends and Issues in Europe. Restricted tender no. EAC/43/05 as completed by 11 August 2006. Brussels: EAEA 2006.

finance? The multitude of aspects that merit closer attention is clear from these and other certainly no less important questions pertaining to quality, basic and continued training of staff, research, accessibility, or target groups.

While the focus here was on European and German views and developments, the UNESCO focus has a global orientation. There is no question that the Pan-European Preparatory Conference dealt with above, and all the other regional preparatory conferences were successful. This is amply evidenced by their results and final documents. Now, however, we are called upon to focus our sights on CONFINTEA VI in Brazil, in an effort to ensure the conclusion of binding decisions that will lay the political, legal, and financial groundwork for securing our field and improving our chances of developing the sector and the profession of adult education for the future. In this process, the more affluent countries must work together with the world's development organizations to assist the poor and less developed countries in their attempts to reach our common goals. There are more than a billion children, youths, and adults in the world who are illiterate or have low literacy skills. CONFINTEA VI must benefit them, too.

People everywhere are looking to CONFINTEA VI with expectations as high as they are diverse, depending on their situation and perspective – from government representatives in industrialized countries, to adult educators in non-government organizations in the poorest of the developing nations, to professionals affiliated with global institutions dedicated to the promotion of multilateral cooperation. At every level we can derive satisfaction in knowing that after a long phase of lean years, our sector – the education of youths and adults within the context of lifelong learning – is growing in importance and recognition.

## LITERATURE

Aldridge, Fiona, Hayley Lamb and Alan Tucket , 2008, “Are we closing the gap?”, A NIACE briefing on participation in learning by adults from minority ethnic groups. Leicester: NIACE.

EAEA Statement. Pan-European CONFINTEA VI Preparatory Conference. Brussels/Budapest: November 2008.

European Commission: Communication from the Commission. Making a European lifelong learning a reality. COM 2001, 678 final.

Faure, E. et al., 1972, *Learning to be. The world of education today and tomorrow*. Paris.

Keogh, Helen, 2008, Adult learning and education (ALE) in the UNESCO region of Europe, North America and Israel. Summary Report. CONFINTEA VI Regional Preparatory Conference for Europe, North America and Israel, 3-5 December 2008, Budapest, Hungary.

Knoll, Joachim H., 1996, *Internationale Weiterbildung und Erwachsenenbildung. Konzepte, Institutionen, Methoden*. Darmstadt.



Lübke, Oliver S., 2008, European developments in adult learning policy. Supplementary statement. Bonn: BMBF Manuscript.

OECD, Centre for Educational Research and Innovation (CERI), 1973, Recurrent Education. A Strategy for Lifelong Learning. Paris.



**APPROACHING THE LABOUR MARKET IN THE EUROPEAN  
EDUCATIONAL ENVIRONMENT. RECOMMENDATIONS,  
TRENDS AND COMPARATIVE EXAMPLES IDENTIFIED IN  
LAJOST RESEARCH PROJECT**

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*Abstract*

The current labour market context has changed much from what was known 2-3 years ago. Thus, technological changes which affect the global society and the global economic crisis have generated irreversible transformations of the labour market and changed the conduct of the actors involved in this process. In this context, the employers, the current employees and candidates for a particular job act differently than few years ago. From the perspective of employers, they are confronted primarily with the global economic recession which generates more possible candidates for a particular job. In parallel, the number of university graduates has increased considerably, which led an increasing number of potential candidates for a particular job. Moreover, thanks to globalization induced by the information society, candidates for a particular job may be more widespread geographically. Therefore, the employer will have to make a more rigorous selection, even using the new media and technology environments that exist, such as online social networks, services, which provide information about jobs, how to access them more successfully, etc. The candidates for a particular job must be aware that there is a more stiffer and a more varied competition (at least in terms of geographical location). Moreover, the economic crisis affects all of us, but maybe mostly those who are looking for a job according to their education and gained qualifications. These persons shall use any possible means, any contacts (online or offline) that can contribute to their success. Considering all that was mentioned above, this paper presents the results of a research conducted in six European countries participating in a research project. So, in this project it is intended to observe how the employers analyse the candidates' portfolios (digital or traditional), what would be helpful for both employers and candidates to know and use. Moreover, the participation of several partners in the research project from different countries can help to

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observe and compare the differences and particularities highlighted and taken into consideration in the European labour market.

*Keywords:* labour market, job, information society, ePortfolios, L@jost

### **Introduction**

Current generations of students are those who know about the existence of Google ever since they entered the school. For them, Google is omnipresent, being a kind of second nature for all people who want to search or to get informed about something. For these generations of students, which have been assigned distinct labels: *millennial*, *digital natives*, or *Generation Y*, educators have to adapt and design new programs and educational offerings. Moreover, teachers should change the way they see the integration of new technologies in everyday life, both for them and their students, in order to understand better the educational needs of students who apparently managed to combine in a very ingenious and natural way the use of new technologies with almost all current activities.

Even if founded opinions are based on the fact that their excessive use can generate the loss of social skills for the next generation, they have no time to reflect upon the knowledge and skills acquired, etc, however, we must understand that using these technologies has become a kind of second nature to them regarding the discussions they have with members of their entourage, building of learning communities, etc.

More importantly, the entire social, economic, information context has changed enormously from what everyone knew 2-3 years ago. If we refer only to the labour market, technological changes affecting global society, and also the global economic crisis led to irreversible changes in the labour market and actors' behaviour involved in this process. In this context, both employers, current employees and job candidates behave differently compared to the same action that took place several years ago.

From the perspective of employers, they are confronted primarily with global economic recession which has, inter alia, the immediate effect of increasing the number of possible candidates for a particular job. In parallel, the number of university graduates has increased considerably, and more than that, thanks to globalization which was induced by information society, candidates for a particular job may be more geographically widespread. Therefore the employer will be able to make a more rigorous selection, even using the new tools and technological environments that exist, such as online social networks which provide information about jobs, how to access them more successfully, etc.

From the job candidates' perspective, they must be aware that they face a more stiffer and varied competition (at least in terms of geographic location). Moreover,

the economic crisis affects each of us, but maybe mostly the people looking for a job according to their education and acquired skills. Therefore, such persons should use all possible means, all contacts (online or offline) that can contribute to such success.

Considering all mentioned above, this paper presents the key skills and competences required throughout the career. Moreover, here will be presented in a non-exhaustive manner the results of a research conducted in six European countries participating in a joint research project. This project will try to observe how the employers analyse the candidates' portfolios (digital or traditional), what would be helpful for both employers and candidates to know and use. The participation of several partners from different countries in the research project can be observed, and in a comparative manner, what differences and particularities are highlighted on the European labour market.

### **Student in Web 2.0 era**

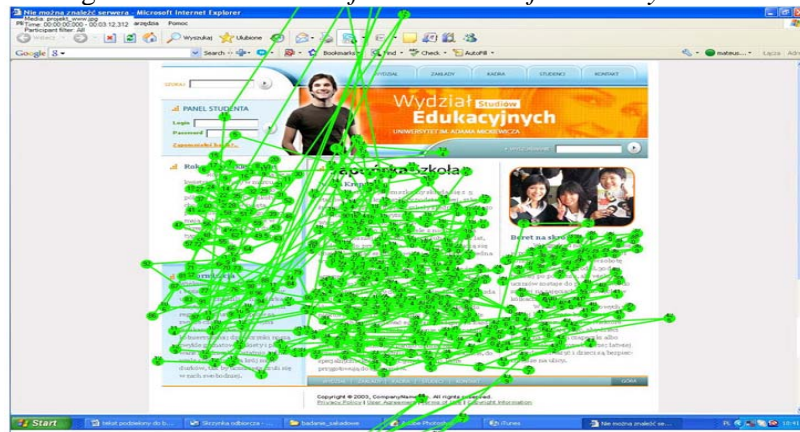
As we mentioned before, the current generation of students is more different than the previous one. Thus, these students are digital natives, using current technology as their second nature, the familiarity with the applications continue to arise day after day being something normal and see it as a routine activity, essential. Moreover, these students are using new technologies for almost all activities, 24 hours a day and 7 days a week are creative and innovative, having different perceptions about social and emotional connections.

Although for some of us it seems somewhat difficult to understand, today young people prefer a very varied visual information content, which is covered in a chaotic manner, as can be seen in the next image, taken from a survey conducted by Stanislaw Dylak and presented at the Online Education Berlin Conference, 2009 by Arthur Dyro.

If, paradoxically, the informational content is based more on text, they don't take it into consideration, they don't read it. If there are uploaded images, links, audio/video/multimedia content, it will be much more exciting, even if in terms of value of information content it is perhaps worse quality than the previous one.

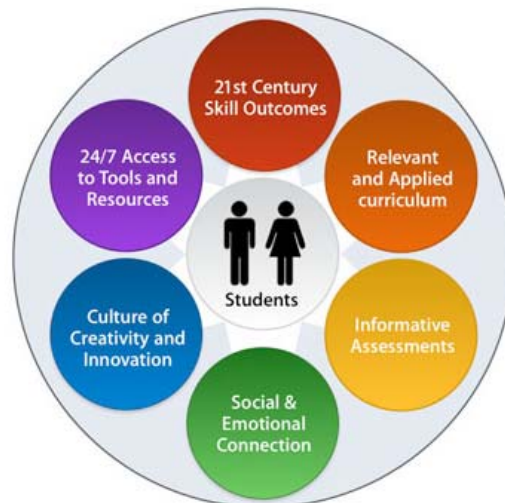
Moreover, they are extremely familiar with using technology and equivalent applications in day by day activities. For them, the video sites and photo sharing, but also applications like social networking and blogs/micro blogs are daily destinations, whether they access them from the static devices such as desktop, or mobile devices such as laptops, PDAs, smart phones/cell phones with Internet access.

Fig. 1. Non-linear view of the contents of a State by students



So, if we consider only those issues, a portrait of the current generation of students is summarized in the following figure:

Fig. 2. Student in Web 2.0 era



Source: <http://ali.apple.com/acot2/principles/>

Considering the above presented, it is clear that for these students, both teachers and the whole of society must prepare. Therefore, in accordance with the XXI century, every regional, national, European or world body tried to take measures to

meet these new challenges generated by the new generation of young (but not only). Even the labour market is adapting, but for a future graduate this is not enough. Unfortunately, the current global economic crisis context may affect mostly the young graduates. For them, integration on the labour market in the coming years will be extremely difficult. Therefore, they also must take measures, to assimilate as much knowledge as they can, to acquire as many skills and competencies as they can, enabling them to show what they know, so that employers and/or recruitment agencies to observe and select them as potential candidates.

### **Key competencies needed in career**

According to “New skills for new jobs” report education, training and jobs are inseparable – there is a relation of interdependence between them. Moreover, each of them will have an ICT component, ubiquitous. Recognizing the importance of all the above, these components can be found across all strategies, policies or measures taken at European and world level by competent bodies.

Thus, at European level, we all know the 8 key components included in Lifelong Learning Strategy, including:

- Communication in the mother tongue
- Communication in foreign languages
- Basic skills in mathematics, science and technology
- Digital Skills
- Learning to learn
- Interpersonal, intercultural, civic or social skills
- Entrepreneurial skills
- Skills for cultural expression

From the perspective of UNESCO, skills and competencies are gathered around the following components:

- Learning to know
- Learning to do
- Learning to live together
- Learning to be

In view of UNICEF, skills and competencies are gathered around the following elements inclusive:

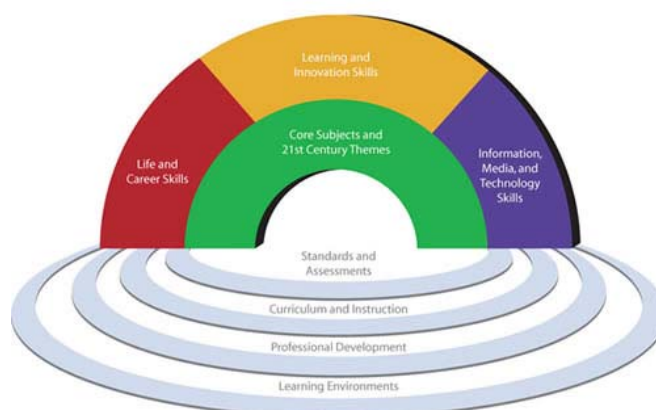
- Interpersonal Communication
- Decision making and critical thinking
- Self-organization and management

According to **OECD** point of view, skills and key competencies are identified as:

- Using various interactive tools
- Language, symbols, texts, knowledge, information, technology
- to interact in heterogeneous groups
- to interact independently:
- to structure life plans (projects, resources evaluation, to set priorities, to monitor the progress, etc.).

In our vision, the 21stCenturySkills project, undertaken in the U.S., manages to squeeze better the key competencies necessary for one person in order to be effective and competitive in this century: they are presented in the following figure:

Fig. 3. *Student in Web 2.0 era*



Source: <http://www.p21.org>

and detailed below:

- Skills for life and career
- Flexibility and adaptability
- Initiative and self-targeting
- Social and cross-cultural skills
- Productivity, Coordination & project management and responsibility
- Skills for learning and innovation
- Creativity and Innovation
- Critical thinking and problem solving
- Communication & collaboration
- Digital skills and competences
- Media, ICT and computer skills



Regardless to which of them we bow and the name of them, we can see that these skills and competencies refer both to the communications and to the networking or information. In addition, there can be observed other skills, as developing critical thinking, problem solving opportunity, innovation and creativity, flexibility and adaptability or productivity and entrepreneurship spirit.

### **L@jost project**

L@jost project – “Learn about finding jobs from digital storytelling” involves a partnership between 6 European countries: Romania (Romanian Institute for Adult Education - IREA), France (European Institute for eLearning), Germany (University of Duisburg Essen and the Institute for Innovation in Learning), Denmark (Danish School of Education), Italy (University of Florence) and Spain (Association Documenta) and is funded through Lifelong Learning Programme - Grundtvig action.

Beginning in December 2008, L@jost is to be completed in late 2010, this project aimed to bring together students, graduates and employers in an online social community, so that those who now have a job to facilitate the access on the labour market for those who still don't work, giving them tips, and employers to freely express their expectations from the graduates in order to facilitate an informal environment for communication between students and employers.

Overall project objective is to stimulate the use of digital stories and ePortfolios among future graduates, in order to facilitate them insertion on the labour market. To achieve the project objectives, the consortium was based on expertise in various areas: ICT, adult education, workforce, training and teaching methodologies, European project management, dissemination strategies, etc., but also on a transnational research in partners' countries involved in the project.

Thus, over 60 companies in Europe have responded to questions like: what is important for decision of hiring graduates, where vacancies are published, how do you identify graduates' skills, importance of previous work experience, etc.

German companies recommended that the application documents (resumes, letters of intent) contain more information about the candidates and they should pay particular attention to the compliance between job requirements and their experiences. Applicants must be well prepared for interviews and to express their preference for work time. Skills as flexibility and openness are very important. The future employees should be highly qualified and to get as much work experience.

Romanian employers said that the job aspirants in their companies should be aware of the difficulties they will face while working, to be well prepared in the required field of expertise and have a very nice attitude to any work colleague. The candidates should know their weak and strong points. He/she should try to acquire

more information about the work place and the position which he/she thinks is fitting better. It also should be given special attention in developing the desired competencies and to the horizons' broadening. Applicants should prepare for each interview and submit applications as much as they can, in order to increase their chances of finding a job.

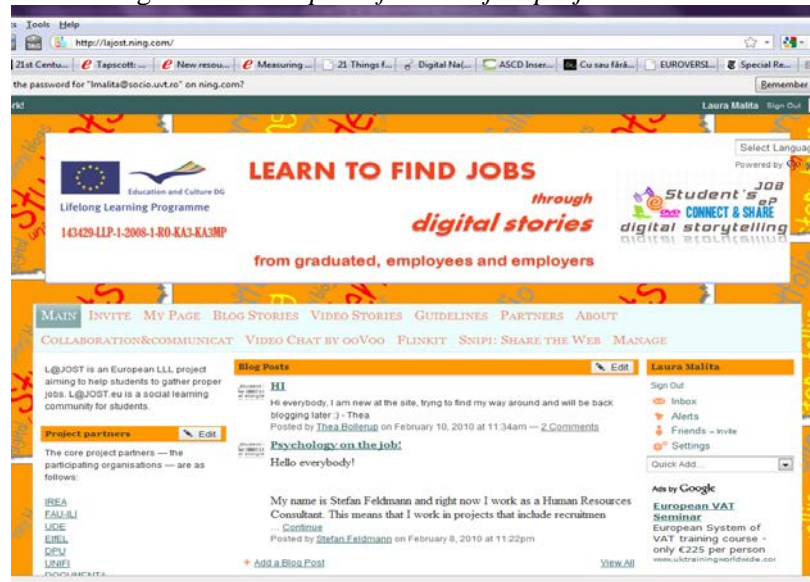
In Denmark, employers have proposed a real work to the applications, which should be justified and addressed to a specific job in the company. These must include, in addition to a resume, copies of certificates from various courses. Candidates must know information about that company where they want to work. In the domain of consultancy services, it is recommended to attach letters of recommendation, along with letter of intent and resume. In Denmark, personal contacts are very important. The applications will be carried personally, so that potential future colleagues should know you. Also, sending an application, without having been previously announced a vacancy, could be an effective way to be hired. This action requires a bit of courage, and is typically found in consulting companies.

A candidate must have clear expectations and future plans – it is the opinion of Italian employers. This should seek to gain professional experience before entering on the labour market. For a private company is very important to know and be sure that those interested in a job within their companies can respond to future challenges. This is why fewer specialised candidates are often chosen because they are flexible and can perform various tasks. In addition, applicants should begin developing their own networks.

The employers from Spain highlighted the importance of education and desire for lifelong learning. The request application must be adapted to the company profile and vacancy. In addition, well-defined interests, and an accurate selection of vacancies could support graduates in their job search. In France, the employers focus on proactive future employees and urge them to believe in the company which offers a job. Applicants must demonstrate that they are satisfied with their job and should not be willing to ask for more. The request application must always be tailored to vacancies and the company.

More details about the research report, but also about the project can be obtained from its website, <http://lajost.eu>, whose homepage can be viewed in the image below:

Fig. 4. Screen capture from L@jost project website



Source: <http://lajost.eu>

## Conclusions

Taking into consideration the skills and competencies presented above, but also the L@jost project description, we can observe that beyond the skills and competencies that would be well reflected in the CVs of candidates, it's good that they use other advantages, too, in order to show they know what they know. Thus, activating in the project's social community, participants will also develop other informal skills: to communicate in a foreign language, to question, to reflect and have a critical thinking relative to a specific situation, computer skills specific to Web 2.0 applications etc. Moreover, they learn from others experience, they learn from their actions or what they found out.

Thus, because an employer / recruitment agency use today additional methods to select potential candidates, to learn more about him beyond what is contained in the resumes, skills and competencies mentioned above should be highlighted in a better way. It is important that this project to provide practical support (examples of good practice) which can count on finding a job, according to the skills and competencies the graduates have.

## REFERENCES

- Malița L, Martin C., 2010, *Digital Storytelling as Web Passport to Success in the 21st Century*, WCES 2010
- Malița L., 2009. “E-portfolios in an educational and occupational context”, in *Procedia – Social and Behavioral Sciences*, 1(1), p. 2312-2316.
- OECD, 2005, *The definition and selection of key competencies*:  
<http://www.oecd.org/dataoecd/47/61/35070367.pdf>
- UNICEF, *Which are life skills?*  
[http://www.unicef.org/lifeskills/index\\_whichskills.html](http://www.unicef.org/lifeskills/index_whichskills.html)
- UNESCO, *Learning the treasure within*,  
<http://unesdoc.unesco.org/images/0010/001095/109590Eo.pdf>
- Recommendation of the European Parliament and of the Council on key competences for lifelong learning, 2005,  
[http://ec.europa.eu/education/policies/2010/doc/keyrec\\_en.pdf](http://ec.europa.eu/education/policies/2010/doc/keyrec_en.pdf)
- The Partnership for 21st Century Skills, *Framework for 21st Century Learning*,  
<http://www.p21.org>

## EDUCATION OF SENIORS' EDUCATORS

BOZENA MANNOVA<sup>1</sup>

### *Abstract*

Because there is increasing number of seniors in the population all around the world, it is very important to provide education for seniors to support their integration into the information society. This paper would like to find answer on question if adult education is different from teaching children. It aims also to provide some basic information about ideas on creating an e-community – virtual centre of people involved in training seniors.

*Keywords:* education of seniors, information society, virtual centre, life-long learning, SEN-NET project

### INTRODUCTION

Aging of the population and the development of an information society are features of the present-day world. Thanks to higher living standards and better health care, people are able to live much longer. This is currently most apparent in the advanced countries, but according to several studies the percentage of seniors in the population will dramatically increase in developing countries, too. A study of the EU countries published in 2004 predicts that 37.8% of the population will be seniors by 2050. However, another study published by the International Herald Tribune in January 2006 predicts the percentage of people older than 60 years worldwide to be only 21.7% by 2050.

Such an aging population trend can lead to a range of problems. To prevent this and to improve the quality of living of seniors it is necessary to extend the active life of people. This is the main goal of life-long learning, which focuses on specific problems related to educating people throughout their lives. Education of seniors forms a standalone branch of life-long learning because of the special needs of this target group. Teaching elderly people thus requires special training for educators of seniors.

The inherent suspicion of older people toward new things, together with the above-mentioned considerations, motivates many individuals all over the world to focus on educating seniors in ICT. This is one of the reasons for the increasing popularity of ICT courses for seniors in the Czech Republic.

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### Seniors in the information society

The influence of the information society is still growing, and this leads to new requirements for integrating seniors into this society. By running ICT courses for seniors at the University of the Third Age (UTA) at the Czech Technical University in Prague (CTU) we are trying to facilitate their integration.

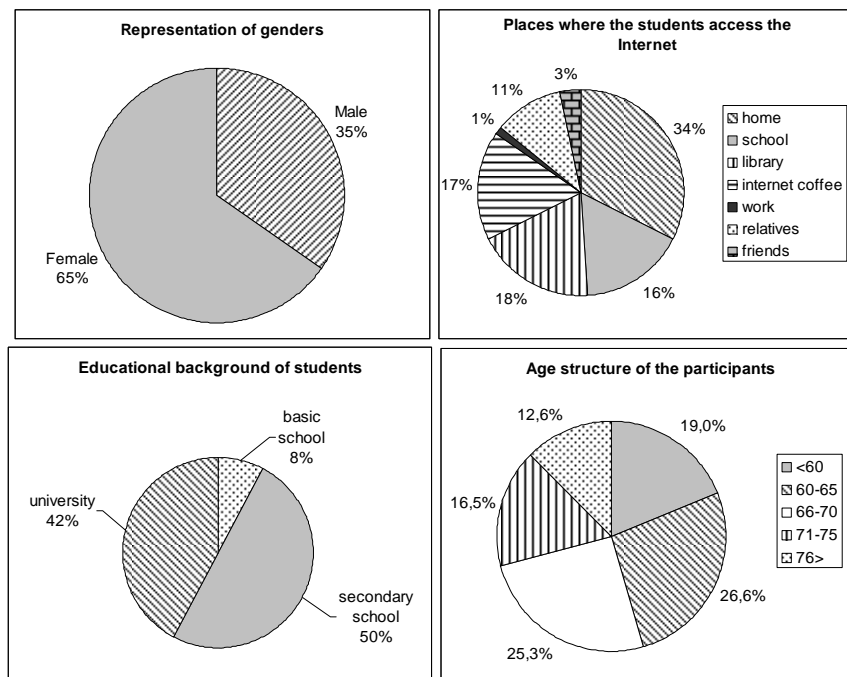


Figure 1. A series of charts presenting the results of various statistical surveys

In order to monitor the incorporation of seniors within the information society and to evaluate the overall quality of our courses, surveys are regularly made. The results from recent years indicate increased interest from females, who form almost 66% of the participants in all ICT courses held at CTU. The actual values of gender representation are depicted in the first chart in Figure 1. The statistics presented by the National Program for Computer Literacy, organized by the Czech Ministry of Information, show very similar results (64.7%). A survey taken at CTU in May 2006 revealed several interesting facts about seniors attending ICT courses at UTA. The number of respondents surveyed was 52. Almost 77% of the respondents answered that they have a computer at home, but only 54% of them had a computer

at work. This points to the interest of seniors to learn how to work with ICT, and it also breaks the myth, deeply rooted in Czech society, that computers are not available to average people. A significant number of seniors stated that the main reason for entering the courses is that they want to keep up with their children and especially their grandchildren. A surprising fact was that only 34% of the respondents stated that access to the Internet in the Czech Republic is unreasonably expensive, which a major change from the previous years was.

The second chart in Figure 1. shows the most frequent places where participants of the ICT courses access the Internet. To further promote their endeavour, it is therefore necessary to provide them with proper training, taking into account their age-related problems (e.g. visual impairments, health problems, limited mobility, etc.), and this also requires specially trained educators of seniors.

The third chart in Figure 1. shows the educational background of the students of the ICT courses at CTU in Prague. The high percentage of seniors with university education is striking.

The fourth chart in Figure 1. presents the age structure of the participants of UTA at CTU in Prague.

### **Seniors as learners**

Different groups of learners are described here by their user's profiles. The user profile contains the information about user and his/her preferences as the user and thus describes a particular learner. The user profile is crucial for personalization because personalization processes must operate always with respect to the user profile.

The user profile can be created implicitly or explicitly. In case that the user profile is created implicitly, the system observes the behaviors of the user and creates the user profile automatically based on his/her behaviors. In case that the profile is created explicitly then the user profile is created by the user himself/herself. Implicit and explicit creation of the user profile can be combined together and thus the user can explicitly redefine the implicitly created profile.

In this paper the profiles of our targeted user groups of ICT education are presented. The profiles should focus on a demographic profile of the learner (age, gender, and socio-economical status) and technology experience. We did survey for all possible target groups and we were looking for differences of profiles to find answer on question what is a difference in learning of those groups. We used questioners for users with the same set of questions. We use flipchart for presentation of the first results of the survey. "Copy" of flipchart results is on Figure 2.

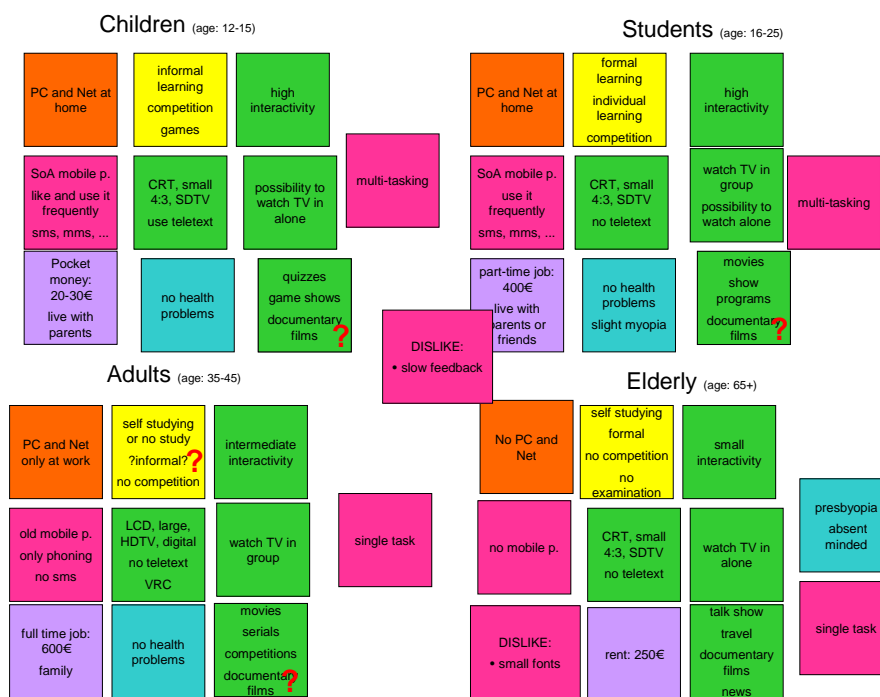


Figure 2. Flipchart with results of users' survey

Based on the user analysis the users were divided into four target groups according to their identical characteristics. The user profiles are as follows:

#### Children (age 12 – 15)

<b>Family and household</b>	Typical member of this target group lives with her/his parents. The parents are in standard financial circumstances. S/he gets 20-30 € of pocket money regularly.
<b>Education</b>	S/he attends elementary school. S/he prefers informal learning in form of competitions and games. S/he has friends in the school and spends lot of time with them. S/he does not attend any extra lessons after school.
<b>Technologies</b>	S/he has her/his own room with standard CRT TV and computer with internet connection. S/he uses the computer mainly for playing games, chatting and searching of information on Internet. S/he has and frequently uses mobile phone, s/he exploits all functionality of the mobile phone (calls, SMS, MMS, WAP,



	etc.). S/he needs to feel up to date with current state-of-the-art technologies. S/he does not have any problems with controlling electronic devices.
<b>Accessibility issues</b>	S/he is able to follow several tasks in parallel. S/he often watches TV and uses computer or mobile phone simultaneously. S/he does not have any perceptual, mental or motor problems which would seriously affect her/his abilities to use electronic devices like PC, TV, mobile phone, etc.

**Students (age 16 – 25)**

<b>Family and household</b>	Typical member of this target group lives with her/his parents or separately with her/his friends. In the last years of study s/he has a part-time job (monthly income is 400 €).
<b>Education</b>	S/he attends high school or university. S/he prefers formal learning (teacher gives a lecture in the classroom, provides printed and electronic courses material; oral and/or written examination). S/he has limited experience with e-learning. S/he prefers individual learning.
<b>Technologies</b>	Her/his room is equipped with standard CRT TV and computer with Internet connection. S/he uses the computer mainly for learning purposes and entertainment. S/he uses Internet every day at least for 2 hours. S/he has and frequently uses mobile phone, s/he exploits all functionality of the mobile phone (calls, SMS, MMS, WAP, etc.). S/he needs to feel up to date with current state-of-the-art technologies. S/he does not have any problems with controlling electronic devices.
<b>Accessibility issues</b>	S/he is able to follow several tasks in parallel. S/he often watches TV and uses computer or mobile phone simultaneously. S/he does not have any mental or motor problems which would seriously affect her/his abilities to use electronic devices like PC, TV, mobile phone, etc. S/he has a minor sight problem (myopia).

**Adults (age 35 – 45)**

<b>Family and household</b>	Typical member of this target group lives with her/his family. S/he has a part-time job (month income is 600 €).
<b>Education</b>	S/he has achieved university degree. S/he is self-studying (reads books, watch documentaries, etc.) or not studying at all. S/he does not want to compete with others during the learning process.

<b>Technologies</b>	Her/his room is equipped with large digital LCD TV with high resolution (HDTV). S/he does not have computer and Internet at home. S/he uses computer and Internet at work. S/he uses the computer mainly for work purpose. S/he has and frequently uses mobile phone, but for phoning only. The mobile phone is of old model. S/he does not have any serious problems with controlling electronic devices, but feels uncomfortable when using new devices with lot of functionality. Does not like to explore new technologies (do not use SMS, MMS or WAP on her/his mobile phone).
<b>Accessibility issues</b>	S/he is not able to follow several tasks in parallel. During watching TV s/he can not comfortably operate another electronic device (e.g., phone). S/he does not have any mental or motor problems which would seriously affect her/his abilities to use electronic devices like PC, TV, mobile phone, etc. S/he has a minor sight problem (myopia).

**Elderly (age 65+)**

<b>Family and household</b>	Typical member of this target group lives alone or with her/his partner. S/he is retired. Her/his monthly income is 250 €.
<b>Education</b>	S/he is self-studying (reads books, watch documentaries, etc.). Though s/he is not subject of any kind of formal education s/he prefers formal learning. S/he is passive and not competitive. S/he does not feel a need to compare her/his knowledge with her/his contemporaries. S/he does not want to be examined and if then anonymously.
<b>Technologies</b>	Her/his room is equipped with standard CRT TV. S/he does not own or use computer or Internet. S/he does not own mobile phone. S/he has problems with controlling more complicated functionality of electronic devices (e.g. tune TV channels).
<b>Accessibility issues</b>	S/he is not able to follow several tasks in parallel. S/he is absent minded. S/he has sight problems (presbyopia) and has two different glasses (one for myopia and one for hyperopia). Therefore s/he dislikes small fonts. S/he is confused when an electronic device has slow feedback on her/his actions.

The comparison of students and seniors user profiles is in Table 1. There is significant difference in income, using ICT, accessibility of computer and Internet. There is also big difference in way of work. Students are able to do more task in parallel, what is impossible for seniors. They have already problems with hearing, vision and they need more time.

	students 16 – 25	elderly 65+
<b>Family and household</b>	this user is part time working with income 400 € per month	this user is retired with income 250 € per month
<b>Education</b>	attends high school or university, no experience with e-learning, no afraid of exams	not working, self studding, is passive, does not want to be examined
<b>Technologies</b>	owns and uses TV, computer, Internet at last 2 hour per day	owns TV, but no computer and Internet, problems with to complicated functionality of electronic devices
<b>Accessibility issues</b>	may follow several tasks in parallel, often watches TV and use computer in one time, no vision and hearing problems	Is not able to follow several tasks in parallel. Problems with vision and hearing, slow feedback, need bigger fonts

Table 1. *Comparison of students and elderly target groups*

### **Teaching of seniors**

Is seniors' education different from teaching children? In many aspects are those educations same, but education of seniors has some specifics. If we will understand those specifics we may improve an adult teaching. Adults have life experience and they are more motivated to learn. They are also motivated different way then children. They are systematic and oriented on context. They have motivation to learn. They have to be recognized. There are even more such aspects and we have to employ them in teaching and learning seniors.

Another question is competences of seniors' educators. The adult learners have to be in link with learner's work, so adult learner may have higher confidence in learning. The learner has to be actively involved in learning. They are also some disadvantages which may influent the learning process of seniors.

Seniors' educator has to know not only that what we mentioned here, but he has to understand of principles how and why adults are learning. The social changes that have accelerated in recent years make seniors' education necessary. Such education needs to be implemented efficiently and in a way that is satisfactory for seniors and also for their educators. A good teacher is a continual learner. He must be able to learn from their environment. More importantly, however, he must be able to learn from his learners. This involves constantly trying to understand how learners react to, interpret and create meaning from different activities.

### Virtual centre

The Virtual Centre for seniors' educators is one way to support life-long learning for seniors. E-learning is another way to improve the quality of this education.

European project SEN-NET tried to support seniors' education in ICT skills and it help to create a network of seniors' educators. The activities of the project aim to facilitate the integration of seniors into the information society. The created virtual centre serves to educators of seniors to form a virtual community and support their collaboration in the preliminary stages of development. The main functionalities of the centre are presented in 3, in the form of a mind map.

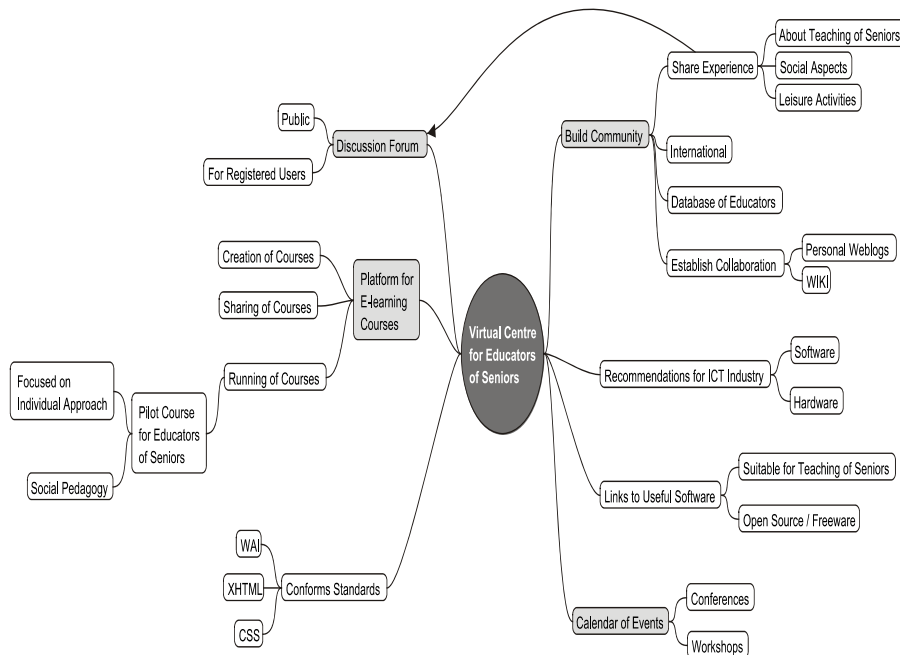


Figure 3. A mind map presenting the Virtual Centre for Educators of Seniors

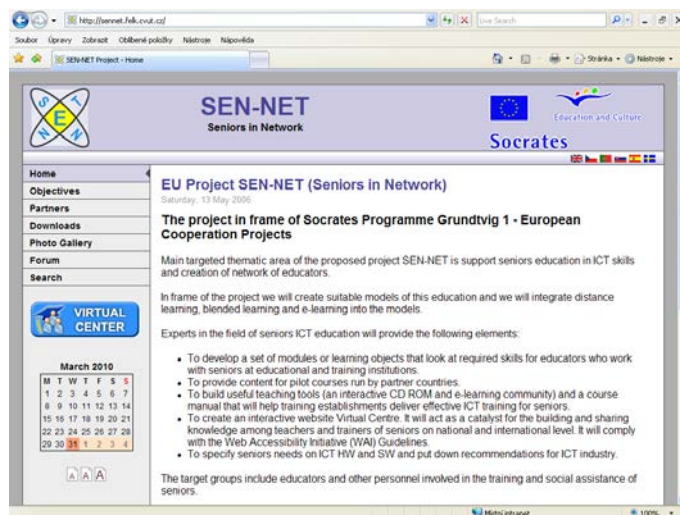


Figure 4. Main page of Virtual centre for seniors' educators

The virtual centre for seniors' education was created in frame of the project SEN-NET in 2008. You may find it on <http://sennet.felk.cvut.cz> and it is used by educators from Portugal, Spain, UK, Sweden, Czech Republic and Slovakia. Screen copy of main web page of the project SEN-NET with Virtual centre is in Figure 4.

## Conclusion

We developed structures, models, methodology and materials for the ICT education of seniors' educators and senior-learners. The network of educators was created in frame of the project SEN-NET. The useful teaching tools and resources to support training establishments in delivering effective ICT training for seniors using blended and e-learning methodology and technology was building.

The rapid advances in new technologies that we experience every day inevitably cause people who do not follow recent developments to become isolated from mainstream society. Especially the enhancements in communication technologies are becoming a barrier that is very difficult for elderly people to overcome. It is difficult to integrate older people into the information society, and without help from society it will be almost impossible. Without proper training, seniors are usually unable to operate new devices or use them efficiently.

*Acknowledgement.*

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**REFERENCES**

Cmolik, L., Mikovec, Z., Slavik, P., Mannova, B., 2007, "Personalized E-learning in Interactive Digital Television Environment:", in *Proceedings of the IADIS International Conference WWW/Internet 2007*. Lisboa: IADIS Press, vol. 2, s. 35-39.

Mannova, B., Bicik, J., 2006, "Virtual Centre for Educators of Seniors", in *Proceedings of the IADIS International Conference on Cognition and Exploratory Learning in Digital Age*. Lisbon: IADIS Press, s. 443-446. ISBN 972-8924-22-4.

Mannova, B., Bicik, J., 2006, Virtual Centre for Seniors' Educators to Enable Integration of Seniors into Information Society, Celda.

Mannova, B., 2004, *Integrating technology into education: the Czech approach*. In: Adapting technology for school improvement, a global perspective, Chapman, D.W. & Mahlck, L. editors, UNESCO,.

Visser, J. and Jain, M., 1996, „Towards building open learning communities: re-contextualizing teachers and learners:, in *Proceedings of Conference Information Technology: Supporting Change Through Teacher Education*. Kiryat Anavim, Israel, 30 June - 5 July 1996.

Website of the SEN-NET project, [On-line], Available: <http://sennet.felk.cvut.cz> [31st April 2010].

Joel May: Tips on teaching seniors. <http://www.ewingsnet.com/documents/Presentations/TipsonTeachingSeniors.pdf> [31st April 2010].

## **ADULT EDUCATION IN THE UNITED STATES AS A SUBJECT OF POLICY AND POLITICS**

ARTHUR L. WILSON<sup>1</sup>

### *Abstract*

This article seeks to examine adult education policy in the United States. It looks at the emergence of formal governmental policy in the 1930s and traces some of the shifting ideological traditions producing policy up to and through the advent of conservative governments from 1980 through 2008. It also examines the scholarly inquiry into adult education policy which shows an emphasis on adult basic education and literacy as a major government responsibility and a broader critical concern of adult educators with emancipatory interests.

In several communications with the editor of this special edition this essay has had various working titles such as “Adult Education as a Subject of Politics,” “Adult and Continuing Education Policy,” “Adult and Continuing Education in Tension Between Society and Politics,” and “Adult and Continuing Education Policy in the US – Major Issues and Trends.” All these and others speak broadly to any number of issues, not the least of which include what do “policy” and “politics” mean. I have chosen the broader terms of policy and politics because I think doing so will allow us to develop a momentary view of a range of issues and trends that might collect under a query about adult education policy and politics in the United States.

To address the larger themes of the special issue, I will report on three related aspects of adult education as a subject of policy and politics: first, an overview of various US policies on adult education; second, a brief review of US adult education scholarly analysis of adult education policy; and third, a brief commentary on what a “politics of adult education in the US” might mean. Whereas the on-the-ground provision of adult education in the US remains a hotly contested effort in terms of who gains access and who does not, who benefits and who does not, overall I would characterize the state of US adult education policy study as fragmented and relatively under-developed. Further, US adult education policy itself is highly fragmented and subject to competing interests that ultimately can be seen to be more concerned in recent times with various sorts of neoliberal economic development initiatives that putatively promote economic well being at

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the expense of other traditions of adult education policy focused on promoting enlightened citizenry, individual progress, and community development. Finally, while there is a vocal minority of both practitioners and academics who avidly promote a political activism in adult education, the larger number of adult educators are more focused on the instrumental provision of adult education with at best socially ameliorative goals.

### **Adult Education Policy**

To begin, all kinds of adult learning and adult education have been evidenced in the United States since its colonial times (speaking from a Western European perspective, that is). But to ask about adult education policy in the United States means to ask for whom, by whom, and to what ends. Here I present examples of adult education policy in the 20<sup>th</sup> century in order to then describe in more detail the policies emanating under conservative governments from the 1980s to the present. One of the first significant adult education policies was the US Government's Federal Emergency Relief Administration (FERA). This policy provided literacy, vocational, and teacher support programs for those most affected by the 1930s Depression. After World War II another major policy initiative was known as the G.I. Bill. It provided educational benefits to millions of returning service personnel whose education had been interrupted by the second world war. In various forms such post-military adult educational benefits have continued ever since. It is possible that the US military services represent one of the world's largest adult education providers. Continuing traditions from FERA in the 1930s, the Adult Education Act of 1964 included some of the most far-reaching adult education policies ever enacted in the United States, committing millions of dollars allocated on a state-by-state basis.<sup>2</sup> Although criticized and never fully funded, it produced a whole generation of various kinds of support for adult basic education, high school diploma equivalency education (General Education Development testing), English-as-a-second-language (ESL), and various employment training acts. Other aspects of adult education were also provided by Title I of the Higher Education Act of 1965. In 1977 the US Congress endorsed the Mondale Act which pledged support for lifelong learning in the US but never funded the mandate. Although there has always been a focus on supporting education for employment

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<sup>2</sup> See: History of the Adult Education Act, National Adult Education Professional Development Consortium, Inc. <http://www.naepdc.org/issues/AEAHistory.htm#1964>. See also: R. Hill, et al. Appendix I, A Review and Critique of the 2008 United States National Report on the Development and State of the Art of Adult Learning and Education.



training, as the conservatives concentrated legislative power in Washington, DC, in the 1980s, more and more legislative action was directed towards reducing the aspects of the welfare state that contributed to the well being of individuals and more was directed towards supporting and subsidizing the workforce training needs of capital and industry.

Historically, then, there have been progressive policies that have addressed adult literacy issues, traditional liberal learning goals, citizenship and civic involvement interests, as well as training for employment possibilities. Since the 1990s the traditional supports for these broad educational goals have diminished as policy interests, representing increasing focus on economic agendas, have come to be dominated by neoliberal concerns for enhancing capitalist expansion, which pass under any number of names such as new capitalism, globalization, knowledge economy, post- or last modernity, and so on. When examining US Government policy statements on adult education, one is confronted with a bewildering array of governmental acts emanating, through congressional auspices, from a variety of governmental departments<sup>3</sup>: the Department of Labor, the Department of Health and Human Services, the Department of Housing and Urban Development, and, of course, the Department of Education.<sup>4</sup> If the Adult Education Act of 1964 was the liberal definer of a generation's effort in adult education in the United States, the Workforce Investment Act, which also included the Adult Education and Family Literacy Act and the Carl E. Perkins Vocational and Technical Act, passed in 1998, represented the next watershed policy initiative by the US Government. The Workforce Investment Act "reforms Federal employment, adult education, and vocational education programs to create an integrated, 'one-stop' system of workforce investment and educational activities for adults and youth."<sup>5</sup> This act enabled the establishment of "one stop" local and state referral centers whose purpose was to make more efficient the assessment of educational needs in order to more efficiently direct adults to proper interventions. The "bottom line" in such efforts has been whether a "client" received the necessary training to get a job, keep a job, or improved performance on the job while mitigating other influences on employment such as health, poverty, and/or educational attainment. Various educational and workforce development acts were thus consolidated legislatively in

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<sup>3</sup> Perhaps the first place to start is to direct readers to enter the US Government's Department of Education at <http://www.ed.gov>. There are myriad links to follow from there.

<sup>4</sup> See, for example, <http://www.ed.gov/about/offices/list/ovae/pi/AdultEd/edlite-2001onestop.html>.

<sup>5</sup> See: [www.ed.gov/policy/adulted/leg/legis.html](http://www.ed.gov/policy/adulted/leg/legis.html).

a spirit of both reducing what was considered egregious transgressions of the social welfare state and promoting a sounder economic national well being by producing a more competitive globalizing economic power. Earlier in the decade the National Center for Education Statistics was distributing compendia such as the National Household Education Surveys' Tabular Summary of Adult Education for Work-Related Reasons, 2002-2003.<sup>6</sup> It is interesting that the accountability movement in US education funding as represented by the President Bush's No Child Left Behind policy of 2000 is paralleled by the Workforce Investment Act call for greater accountability by documenting success either through employment placement or advancement. It is also interesting that a lot of the information available to the public on government educational web sites represents more activity from the early 2000s rather than toward the end of Bush's second term. That does not mean adult education has disappeared from policy purview. In September 2007 then-President George Bush issued the following "Executive Order: Strengthening Adult Education"): "It is the policy of the United States to use existing Federal program that serve adults, including new Americans, to strengthen literacy skills, improve opportunities for postsecondary education and employment, and facilitate participation in American life."<sup>7</sup> The executive order defines anyone over 16 years old as an adult and adult education as the "mastery of basic education skills to function effectively in society; secondary school diploma or its equivalent; or the ability to speak, read, or write the English language." The Hill et al. critique of the National Report is quite critical of this executive order. Even so, despite the relentless press of neoliberal government economic policies for decades, this directive is remarkably similar to policy initiatives dating from the Adult Education Act of 1965 and has roots in the FERA policies in the 1930s. The Workforce Investment Act is perhaps a penultimate example of neoliberal economic policy. Yet in its midst is an executive order reprising, or perhaps better said, continuing more liberal notions of adult education policy in the United States.

Early observations of the inaugural efforts of President Barack Obama, given the extremity of the current worldwide economic collapse, augur perhaps for a new era in educational policy in the United States. Indeed, in President Obama's first State of the Union address in February 2009 to both houses of Congress called for more adult, vocational, continuing, and higher education as the responsibility and

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<sup>6</sup> K. O'Donnell, Tabular Summary of Adult Education for Work-Related Reasons: 2002-03 (NCES 2005-044). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office, 2005.

<sup>7</sup> See: <http://www.whitehouse.gov/news/releases/2007/09/20070927-11.html>.

duty of American citizens.<sup>8</sup> This call comes immediately after highly partisan passage of American Recovery and Reinvestment Act of 2009. In January 2009 the American Association for Adult and Continuing Education organized a lobbying push for a \$500 million dollar addition to the already budgeted \$500 million in the FY 2008 budget “for adult training and employment programs.”<sup>9</sup> This call was preceded earlier in January 2009 by legislative call from ProLiteracy Worldwide<sup>10</sup> for “Increased Funding to Support Literacy Programs” because nearly one in seven in the US lack basic reading skills, that many unemployed lack reading skills, that \$60 billion a year is lost in lost productivity because of literacy and health problems, and that almost 90 percent of adults who need literacy training cannot get it because of a lack federal, state, and local funding: “Program funding would inherently benefit the overall economy, as it provides additional tax income, more employment, reduced welfare payments and greater citizen involvement.” Such a call could have easily been issued in the 1960s but still resonates today even with its emphasis on economic improvement through adult education. It will be seen whether such policy calls represents a continuation of or break from the neoliberal agendas of the last three decades in American educational policy.

### **Adult Education Policy Study**

Ever since the 1920s in the United States there have been professional efforts to influence governmental adult education policy through the various formal professional organizations (American Association of Adult Education, Adult Education Association of the USA, American Association of Adult and Continuing Education; each of these was successor to the former in one way or another). It is common practice in the United States for trade and professional associations to try to influence governmental policy regarding the provision and regulation of professional efforts like adult education. Leadership in these various societies both commissioned or conducted adult education policy analysis and effected efforts to influence national policies. Those efforts continued until the 1990s when the American Association for Adult and Continuing Education (AAACE) splintered into two associations (the parent remained and the Commission on Adult Basic Education [COABE]<sup>11</sup> departed). Afterwards AAACE reduced many of its

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<sup>8</sup> See: <http://www.whitehouse.gov/blog/09/02/24/The-Presidents-address-Excerpt/>

<sup>9</sup> See: <http://www.aaace.org>

<sup>10</sup> See: <http://www.proliteracy.org>. ProLiteracy is non-profit educational organization that “champions the power of literacy to improve the lives of adults and their families, communities, and societies.”

<sup>11</sup> See: <http://www.coabe.org>

activities to membership services while COABE continued its legislative policy initiatives for adult and family literacy as well as English-as-a-Second Language education. Both a complementary and competing area of practice and inquiry concerns itself with what has many names such as human resource development, human capital development, training and development, and so. The American Society of Training and Development (ASTD), organized in 1944, now claims 70,000 members worldwide under a banner of “through exceptional learning & performance, we create a world that works better.”<sup>12</sup> ASTD has an active legislative agenda and provides “up to the minute” information of workplace policy emanating from Washington, DC: “What should you know about this bill [the American Recovery and Reinvestment Act of 2009], and what can you do to help your organization take advantage of these opportunities.”

Also more and more prevalent in American society are various kinds of “think tank” organizations who study economic, political, educational, and other societal conditions in order to comment on and make recommendations for US adult education initiatives. The Center for American Progress is one example. “Lifelong Learning: New Strategies for the Education of Working Adults” was recently published to argue that all the economic gains made in the latter half of the 20<sup>th</sup> century are now threatened because “the American worker is steadily becoming less educated just when better and more diverse educational opportunities are essential for our labor force to maintain its justifiably famous productivity, flexibility and ingenuity.”<sup>13</sup> The author further argues that as educational attainment stagnates so too will economic growth, therefore policy changes are necessary: “the United States can no longer pursue an educational policy that essentially gives up on adults...[we have to] get much better at educating our working adults.”<sup>14</sup>

Academically speaking, the formal study of adult education emerged in the 1920s and grew to some presence by the late 1970s in terms of having established academic programs of study in higher education. Academic adult educators have historically taken an interest in policy, and there is a sporadic history of adult education policy analysis.<sup>15</sup> Since the 1980s the presence of formal inquiry in adult

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<sup>12</sup> See: <http://www.astd.org>.

<sup>13</sup> B. Bosworth, *Lifelong Learning: New Strategies for the Education of Working Adults*, p. 1, American Center for Progress 2007. ([http://www.americanprogress.org/issues/2007/12/lifelong\\_learning.html](http://www.americanprogress.org/issues/2007/12/lifelong_learning.html)).

<sup>14</sup> *Ibid.*

<sup>15</sup> For example, there have been a series of “handbooks” published in the United States approximately every 10 years since the 1930s; they do include policy analyses as did the 1989 and 2000 editions and as will the forthcoming 2010 edition.

education in higher education has either waned on US academic campuses or more often been assumed under human resource and workforce development programs, reflecting the generational shift from humanist, progressive orientations to adult education to the more economically-focused agendas of government policy in recent times.

One area of study that has consistently interested academic adult education analysts is that of the governmental provision for adult basic education. As indicated earlier federal funding first became available as early as the 1930s and became institutionalized in the 1960s. I have tried to indicate so far that such policies while undergoing a major shift in emphasis to workforce issues in the 1990s also still reflect earlier concerns with citizenship and human development. In a review of the 5<sup>th</sup> volume of *Adult Learning and Literacy: Connecting Research, Policy, and Practice*, sponsored by the National Center for the Study of Adult Literacy and Learning, Guy argues that even though adult literacy policy has been around for many decades, it is still “highly fragmented and subject to fits and starts in its development.”<sup>16</sup> Even though he characterizes the National Center’s effort as uneven, he finds promise in the fact that there is enough scholarly interest to have produced 5 volumes. Another effort to characterize literacy policies appeared also in 2005: *Conflicting Paradigms in Adult Literacy Education: In Quest of a U.S. Democratic Politics of Literacy*.<sup>17</sup> The author, George Demestriion, organizes his review of literacy efforts since the 1980s from three perspectives: the participatory literacy movement, new literacy studies, and the functional workforce perspective. Allan Quigley, a prominent scholar on literacy policies in the US and Canada, argues that Demestriion’s effort creates a hitherto unwritten history of the “Bush-Clinton-Bush” years in order to show that literacy policy efforts are hotbeds of conflict and that literacy policy is not “a politically benign, pedagogically simplistic set of activities to teach adults to read.”<sup>18</sup> The most trenchant critique yet of US literacy policies just emerged in December 2008 under the authorship of Robert J. Hill of the University of Georgia and a number of his colleagues.<sup>19</sup> In preparation for CONFINTEA VI in 2009, UNESCO, through its Institute for

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<sup>16</sup> T. Guy, Review of *Adult Learning and Literacy: Connecting Research, Policy, and Practice* (v. 5), edited by J. Commings, B. Garner, and C. Smith, Lawrence Erlbaum, Mahwah, NJ, 2005. *Adult Education Quarterly*, 2006, 56 (3), 227-229.

<sup>17</sup> G. Demestriion, *Conflicting Paradigms in Adult Literacy Education: In Quest of a U.S. Democratic Politics of Literacy*, Lawrence Erlbaum, Mahwah, NJ, 2005.

<sup>18</sup> A. Quigely, Review of *Conflicting Paradigms in Adult Literacy Education: In Quest of a U.S. Democratic Politics of Literacy*. *Adult Education Quarterly*, 2007, 57 (4), 347.

<sup>19</sup> Op. cit. fn. 1.

Lifelong Learning, requested “national reports” on adult learning and education. The report put together by the US National Commission for UNESCO is extremely flawed according to Hill and colleagues: the Commission neglected the participatory process indicated by UNESCO, the report addressed very few of the indicated content areas, and the policy “implicit” in the report is “designed to remediate defective low-wage workers”: “Readers of the U.S. National Report will not come to understand how ALE [adult learning and education] polices are formed, how various interests are negotiated, conflicts handled, consensus arrived at, or the rationale behind allocation of resources. There is no integration of economic policies with social mechanisms and processes that can mitigate the sociocultural determinants of the problems that adult learning and education have the power to address.”<sup>20</sup>

Other analyses focuses on more general policy issues in adult education. Quigley, for example, argues that the general endeavor once known as “adult education” has in the later part of the 20<sup>th</sup> century abandoned its responsibilities for contributing to a just society by its ever-increasing development into sub-specialties that have fragmented the broader field of effort.<sup>21</sup> He proposes that adult education can reclaim its prominence by recognizing how it has given up its earlier interests in progressive social change, that by definition adult education should be engaged in the very “visioning” of a better society, and that the field needs to develop strategies for helping create a “more equitable civil society for all.”<sup>22</sup> He proposes social policy as a major mechanism for achieving a just society. Mayo argues that while institutions like state-funded universities are often sites for creating and maintaining hegemonic arrangements, they can also be sites of resistance.<sup>23</sup> In a similar manner, Holtz has argued that “the economics of the globalization process affect people’s understanding of the prospect of social change, how this change should take place, and who are the most likely agents of this change.”<sup>24</sup> Torres claims that “since the capitalist state has a class content reflected in its policy-making, adult education policies constitute an example of

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<sup>20</sup> Op. cit., p. 4-6.

<sup>21</sup> A. Quigley, *Adult Education and Democracy: Reclaiming Our Voice Through Social Policy*. In, A. Wilson and E. Hayes (eds.), *Handbook of Adult and Continuing Education*, San Francisco, Jossey-Bass 2000.

<sup>22</sup> Op. cit., p. 210.

<sup>23</sup> P. Mayo, “In and Against the State”: Gramsci, War of Position, and Adult Education, *Journal of Critical Educational Policy Studies*, 2005, 3 (2).

<sup>24</sup> J. Holts, *The Politics and Economics of Globalization and Social Change in Radical Adult Education: A Critical Review of Recent Literature*, *Journal of Critical Education Policy Studies*, 2007, 5 (1).

class-determined policies oriented to confront the political and social demands of the powerless and impoverished sectors of any capitalist society.”<sup>25</sup> Wickens and Sandlin argue that most literacy education formulated by international organizations like the World Bank UNESCO represent a form of neocolonialism in the way they envision the purposes of literacy in traditional functionalist ways as tied to the workforce and how the programs are funded according to their productivity.<sup>26</sup> Greene examines the provision of adult education in New York City to ask the classic adult education purpose question – education for domestication or liberation – to argue that “gatekeeping” by professional educators who work to serve the market.<sup>27</sup> All such analyses represent the critical emancipatory interests of adult education scholarship that find problematic the putative abandonment of traditional social change goals in US adult education and wish to criticize the neoliberal turn in policy formation.

### **The Politics of Adult Education**

American adult educators have long argued that adult education is necessary in order to “keep up” in a rapidly changing society. Lifelong learning as central to the economic well being of nations by continually retraining that developed so prominently in Western European nations in the 1990s was preceded in the US with lifelong learning as a developmental process for all maturing adults. Adult education policy in the United States has traditionally supported the needs of society by focusing on the needs of individuals. Reaching higher educational attainment, becoming a more responsible citizen, contributing to economic progress have all been central to policy initiatives since the 1930s in the United States. Beginning in the 1980s with the rise of conservative governments foremostly supporting the expansion of capital, more and more policy has favored market orientations to providing adult education and for adult education to serve. Adult education is both subject of policy and subject to policy and the production of policy is always political. Different ideological orientations drive the production of policy, and I have tried to introduce those shifting ideological traditions that have produced adult education policy in the US. Scholarly traditions in the US

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<sup>25</sup> C. Torres, *A Political Sociology of Adult Education: A Research Agenda*, Education (Malta), 1991, 4 (1), 31.

<sup>26</sup> C. Wickens and J. Sandlin, *Literacy for What? Literacy for Whom? The Politics of Literacy Education and Neocolonialism in UNESCO- and World Bank-Sponsored Literacy Programs*, *Adult Education Quarterly*, 2007, 57 (4) 275-292.

<sup>27</sup> D. Greene, *Gatekeepers: The Role of Adult Education Practitioners and Programs in Social Control*, *Journal of Critical Education Policy Studies*, 2007, 5 (2).

have tended to be mostly centrists and instrumental albeit with a fairly vocal minority favoring leftist emancipatory and liberationist efforts. As the scholarship reported here indicates, those that identify themselves with radical liberatory traditions can be counted upon to counter the capitalist motivations of much current policy by invoking references to adult education's historical involvement in social movement involvement such as the labor movement, the civil rights movement, the anti-war movement, or the women's movement. As ideological traditions square off to promote policy that favors their orientations at the expense of their opponents, then policy is politics. So, historically, American adult educators have laid claim that the right way is the liberatory way and that repressive ideologies always require confrontation. But with their long term interest in the study of adults and their learning, most American adult educators have tended to not see the on-the-ground daily politics of actual adult education practice. Even though some of the last generation of American adult education scholars has struck a defiant intellectual stance in the face of oppression and domination, the study of the political practice of adult educators is only just beginning in the US.



## SOCIAL RIGHTS – DEVELOPMENTS

IRINA MOROIANU ZLĂTESCU<sup>1</sup>

### *Abstract*

Referring to the social developments in the context of the global economic crisis, the author examines the European Social Charter and other Council of Europe treaties with regard to the continental social model. Ample space is devoted to the European Social Charter revised and its monitoring and control mechanisms and procedures after ten years since it became effective. In this respect, she analyses the status of the various social rights in Romania, in its capacity as State party, since 1999, to the European Social Charter revised; at the same time, she analyses the commitments Romania assumed by ratifying, in 2009, the European Code of Social Security, as well as in its capacity as State party to ILO's Convention No. 102. In conclusion, she points out the need to identify solutions capable to adjust the protection of social rights to the latest developments, avoid deviations and prevent effects highly affecting social cohesion and democratic stability.

The economic crisis has brought along a reconsideration of the European and the world social policy. Hence, the need for redefining its objectives, while at the same time making use of the existing norms. As numerous experts pointed out, one can speak about a time of social protection restructuring, as well as the capacity to adapt to the new situation. The main requirement consists in finding and using the most adequate means that allow maintaining social cohesion among all members of society, between those who make an active contribution to its progress and those who are totally or partially excluded from the process of finding solutions to the big social and economic problems, between men and women, between generations.

The Council of Europe Parliamentary Assembly pointed out in its Recommendation 1355 (1998): “The Council of Europe is the sole pan-European organization capable of effectively proposing to all the countries of the continent the necessary measures for taking on the challenge of strengthening social cohesion in Europe as a factor of the continent’s democratic stability”.

Obviously, indivisibility of the civil and political rights and of the economic, social and cultural rights is acknowledged in the documents adopted by the Council of Europe and all the other big international intergovernmental organizations, particularly so the United Nations Organization and the International Labour Organization, a specialized UN institution dealing with labour and social security issues, whose founding members include Romania as well. Moreover, at regional

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level, many of the countries belonging to the European Union are parties to the International Covenant on Economic, Social and Cultural Rights which, together with the International Covenant on Civil and Political Rights and the Universal Declaration of Human Rights is one of the constituent elements of the International Charter of Human Rights. As a result, the respective countries are bound, by virtue of the international law, to observe and ensure the observance of the economic and the social rights within their national borders.

As far as the Council of Europe is concerned, the European Convention on Human Rights, adopted on 4 November 1950 and in force since 3 September 1953, alongside its additional Protocols, guarantee the civil and political rights, while the European Social Charter, opened for signature on 18 October 1961 and in force since 26 February 1965, was meant to regulate the rights in the economic and social field.

It includes 'a set' of nineteen fundamental rights whose norms refer to labour protection, social protection and the protection of certain categories of persons, which were added, by means of the Additional Protocol of 1988, four more rights.

Also, in time, control upon the observance of the commitments assumed by the Parties was strengthened by means of the Additional Protocol of 1991, which brought along procedural amendments, as well as the provisions of the Protocol of 1995 referring to the establishment of an efficient system of collective complaints.

The developments that have occurred since the Charter was adopted in 1961 are reflected by the European Social Charter revised, opened for signature in May 1996 and in force since 1 July 1999, which also broadened the perception of the economic and social rights. This regional instrument amends and supplements the list of consecrated rights including in a single instrument the rights provided for by the previous documents, as well as a number of new rights.

The Social Charter revised broadens the sphere of the rights that have to be provided for, observed and guaranteed, by including new provisions referring, among other things, to just conditions of work, safe and healthy working conditions, the protection of children and adolescents, vocational training, the protection of working mothers, professional integration, the social integration of persons with disabilities, protection in cases of unemployment, or the procedures to be followed in cases of collective dismissals. One of the new rights it guarantees is the right to dignity at work. Moreover, the Social Charter revised is the first international treaty consecrating the right to protection against poverty and social exclusion, two major violations of human dignity. It is thus for the first time that an international document points out the relation between the social element and human dignity.

This Treaty is progressively substituting the old Treaty of 1991; nevertheless, the States are not bound simultaneously by commitments at different levels. Once a State Party has acceded to the Charter revised, application of the initial Charter and its Additional Protocol is terminated.

In time, the European Social Charter proved to be a particularly important instrument for the following reasons:

- The document has a large area of application, bearing in mind that, at present, 47 countries on the Continent belong to the Council of Europe. The composition of the Council of Europe is much larger as compared to the European Union, and the lead is going to last for a long time.

- The Charter protects, by its provisions, a large range of social rights, their number having been increased from 19, as were in the initial text adopted in 1961, up to 31.

- The Charter is more than a mere text including a list of rights or provisions referring to the level of the protection to be ensured. It is a legally binding Treaty, under which the Contracting Parties, upon ratification, accept to be subject to a control mechanism by which, based on the reports submitted by each country, the independent experts appreciate the way each country observes the assumed provisions.

- It is a reference legal instrument. The conclusions and the actual effects of the control mechanism can entail modification of the legislation or the practice in the Council of Europe Member States. As a matter of fact, implementation of the revised control mechanism opens new possibilities of progress with the protection of the fundamental human rights under the national legislations, which have to take into account the remarks and, implicitly, the recommendations made by the experts.

- It proves to be a genuine driving force for important social changes and the progressive implementation of all the provisions, observance of the assumed obligations and progress with broadening the commitments area.

- To the countries not belonging to the European Union, the Social Charter is the most comprehensive treaty protecting human rights in all social fields. Even for the European Union Member States the document provides, in certain fields, a better level of protection than the Union's norms do.

Obviously, the Charter is a perfectible legal instrument. What matters is that, by its contents, by the means it enshrines so that its provisions shouldn't remain just empty words, the European Social Charter offers the way and the framework that ensure a broader protection of human rights.

The reader of the European Social Charter, particularly in its revised form, will find that the document mainly consists of two parts. The first one could be labeled as a political instrument of social development, while the second part is, as many experts view it, a binding legal instrument. They are, of course, two complementary parts making up a whole that includes a wide range of rights as well as a system of accepting the Charter's content, which allows the Contracting Parties and the control bodies established by the Council of Europe to evaluate in time the way commitments are made and observed, while leaving an open 'gate' for new provisions to be laid down, accepted and observed. As a matter of fact, it is precisely such flexibility that allowed for the revision of the European Social Charter. And such operations are likely to happen again.

It is worth mentioning the originality of the Social Charter, also consisting of the instituted control mechanism, one of a political, not jurisdictional nature where, as shown before, four bodies come in successively: the European Committee of Social Rights, the Governmental Committee, the Committee of Ministers and the Council of Europe Parliamentary Assembly. The main 'part' of the system is the European Committee of Social Rights. Established under art. 25 in the European Social Charter, it performs its activity in control cycles.

It is worth mentioning that the international control procedure is applied in conformity with the one resulted from the modifications included in a Protocol adopted in 1991 and made effective as a result of a decision by the Committee of Ministers. On 9 November 1995, the Additional Protocol referring to the collective complaints system (STCE No. 158) was opened for signature. The document was meant to increase the effectiveness of the Social Charter control mechanism by adding the complaints referring to violations of the Charter's provisions to the examination of the governmental reports. Ratification by five countries was required for the Additional Protocol to come into force, on 1 July 1998.

In September 1996, the Committee of Ministers adopted a new system for the presentation of reports according to which the countries under control shall submit reports referring to the observance of the same provisions and for the same period of time. Actually, in terms of the regulated rights, the Charter's provisions were divided into two categories: those belonging to the so-called 'hard core' and those outside this category, respectively. The first group includes the provisions of arts. 1 (the right to work), 5 (the right to organize), 6 (the right to bargain collectively), 12 (the right to social security), 13 (the right to social and medical assistance), 16 (the right of the family to social, legal and economic protection), and 19 (the right of migrant workers and their families to protection and assistance). The second one includes arts. 2 (the right to just conditions of work), 3 (the right to safe and healthy working conditions), 4 (the right to a fair remuneration), 9 (the right to

vocational guidance), 10 (the right to vocational training), and 15 (the right of persons with disabilities to independence, social integration and participation in the life of the community) in the European Social Charter, as well as art. 3 (the right to take part in the determination and improvement of the working conditions and working environment) in the Additional Protocol to the Charter adopted on 5 May 1988.

While the reports on the observation of the provisions laid down in the hard core were to be submitted on 30 June of odd-number years and referred to a reference period of two years, those regarding the provisions outside the 'hard core' were to be submitted on 31 March of even-number years and present each time the situation related to the observance of half the number of articles, with a reference period of four years. In case the State so wishes, these reports can be presented together with those regarding the observance of the provisions included in the 'hard core'.

Three stages can be distinguished with the procedure:

I. The first stage is evaluation by the European Committee of Social Rights of the reports presented by each country subject to control, a process by which the conformity of the national legislation and practice with the provisions of the Charter accepted by the reporting country is evaluated. The Committee can ask each country additional questions or one to several 'general questions' in case the issue that needs clarifications concerns all Contracting Parties.

The conclusions can be:

- negative, in case it is appreciated that a Contracting Party's legislation and/or practice fails to observe, partly or totally, one or several previously accepted provisions of the Charter;

- positive, in case the situation is found to be satisfactory;

- postponing the decision, in case not all the data needed for making a decision are available.

II. The second stage is examination by the Governmental Committee of the texts of the national reports and the European Committee's conclusions. This body shall convene at least twice a year and includes one representative for each country. They prepare the texts of the Committee of Ministers' decisions and select, based on social and economic policy reasons, the situations that should, in the opinion of the Governmental Committee, be the object of the recommendations the Committee of Ministers makes to the Contracting Parties.

III. The third stage is an examination by the decision-making body of the Council of Europe, the Committee of Ministers – whose structure includes one representative of each Council of Europe Member State, usually the Foreign Affairs Minister – of the Governmental Committee's report.

Bearing in mind the Governmental Committee's preliminary report, the Committee of Ministers takes to voting in order to adopt a general resolution regarding the entire control cycle and address individual recommendations to the Contracting Parties.

According to the situation of 4 May 2009 regarding the signing and ratifying processes of the Council of Europe Conventions, the European Social Charter revised (STCE No. 163), in force since 1 July 1999, had been ratified by 27 of the 47 Council of Europe Member States, and signed without ratification by another 16 States. The only Member States that haven't affixed their signatures are Croatia, the former Yugoslavian Republic of Macedonia and Switzerland.<sup>2</sup>

The new Treaty was signed by Romania on the occasion of the Colloquium on "The Social Charter of the 21<sup>st</sup> Century", held in Strasbourg on 14-16 May 1997, and ratified in May 1999. The ratification moment significantly coincided with the 50<sup>th</sup> anniversary of the Council of Europe. Having met the required number of ratifications, three, the Charter came into force on 1 July 1999.

According to the Ratification Act<sup>3</sup>, Romania ratified the European Social Charter revised (art. 1), with the following declarations:

"In accordance with the provisions of Article A, paragraph 1, of Part III of the Charter, Romania accepts Part I of the Charter as a declaration of the aims which it will pursue by all appropriate means and considers itself bound by the provisions of Article 1; Articles 4 - 9; Articles 11, 12, 16, 17, 20, 21, 24, 25<sup>4</sup>, 28 and 29, as well as, moreover, by the provisions of Article 2, paragraphs 1, 2, 4 - 7; Article 3, paragraphs 1 - 3; Article 13, paragraphs 1 - 3; Article 15, paragraphs 1 and 2; Article 18, paragraphs 3 and 4; Article 19, paragraphs 7 and 8, and Article 27, paragraph 2.

Romania declares that it accepts that the application of the legal commitments contained in the European Social Charter (revised) is subject to the control mechanism provided for in Part IV of the European Social Charter adopted in Turin, on 18 October 1961" (art. 3).

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<sup>2</sup> The most recent ratifications: Hungary (20 April 2009) and Slovakia (23 April 2009).

<sup>3</sup> Law No. 74/3 May 1999 on the ratification of the European Social Charter revised, adopted in Strasbourg on 3 May 1996. The ratification instrument, No. 490, was deposited on 7 May 1999.

<sup>4</sup> In a Note Verbale from the Permanent Representation of Romania, dated 16 April 2004, registered at the Secretariat General on 21 April 2004, Romania declared that art. 26 shall be read art. 25, which had not been notified at the moment the ratification instrument had been deposited.

The Annex, which an integer part of the Law, actually lists the Romanian institutions having powers with the implementation of the European Social Charter revised.<sup>5</sup>

On ratifying the European Social Charter revised, Romania accepted 65 of the 98 paragraphs of the Treaty, without being bound by the collective complaints procedure.

As far as the unaccepted provisions are concerned, on 6 May 2009 the European Committee of Social Rights (ECSR) held in Bucharest a meeting with the Romanian Government's representatives.

According to art. 11 in the Constitution, "the Romanian State pledges to fulfill as such and in good faith its obligations as deriving from the treaties it is a party to (1). Treaties ratified by Parliament, according to the law, are part of national law (2). If a treaty Romania is to become a party to comprises provisions contrary to the Constitution, its ratification shall only take place after the revision of the Constitution (3)".

In 2001-2008, eight reports on the implementation of the provisions of the Charter revised were submitted. The second Report on the implementation of the Charter revised, presented by Romania on 3 February 2008, referring to the thematic grouping "Employment, training and equality of opportunities" for the period 1 January 2005 – 31 December 2006, was the first to be elaborated in conformity with the new system of reports adopted by the Council of Ministers in its 963<sup>rd</sup> Meeting of Ministers Delegates, on 3 May 2006 (applicable periods of reference: 1 January 2003 – 31 December 2006 for art. 18, and 1 January 2005 – 31 December 2006 for arts. 1, 9, 15, 20, 24, and 25).

Romania's Report of 15 January 2009 referred to art. 3 paragraphs 1, 2 and 3, and arts. 11, 12 and 13, paragraph 1 – health, social security and social protection respectively.

On 30 November 2009, Romania registered at the Social Charter Secretariat its ninth Report on labour-related rights (arts. 2, 4, 5, 6, 21, 22, 26, 28 and 29) for the period 1 January 2005 – 31 December 2008).

According to ECSR's conclusions, which legally appraise the conformity of the national situations with the Charter's provisions and adopts conclusions in the framework of the report submitting procedure, Romania achieved progresses, including:

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<sup>5</sup> Ministry of Labour and Social Protection; Ministry of Foreign Affairs; Ministry of Justice; Ministry of National Education; Ministry of Youth and Sports; Ministry of Public Works and Land Arrangements; Ministry of the Interior; Ministry of national Defence; Ministry of Culture; Ministry of Transports; Ministry of Industry and Trade; Ministry of Finance; Child Protection Department; State Secretariat for People with Disabilities.

- In the field of health: elaboration of a list of occupations or activities that involve a reduction of the workday for reasons of health risks, with the modification in 2003 of the Labour Code; limitation of publicity and selling of tobacco products, by means of Law No. 148/200, as well as measures to prevent and combat the adverse effects of smoking (Law No. 90/2004);

- In the field of the rights of the child and the adolescent: a wide range of measures adopted under Law No. 272/2004 was implemented by the National Authority for the Protection of the Rights of the Child; also, the Government approved in 2004 the National Plan of Action for the elimination of child labour (Government Decision No. 1769/2004) and prohibited, under Law No. 678/2001, child trafficking for whatever exploitation, the sexual one included; Law No. 217/2003 on preventing and combating domestic violence;

- Equality and non-discrimination: prohibition of discrimination at work (Ordinance No. 137/2000, amended by Law No. 48/2002), of any gender-based discrimination with the access to social security services (Law No. 76/2002) as well as with every aspect of the professional life, with the introduction of the right to equal salaries for equal work (Law No. 202/2002), prohibition of any discrimination at work for reasons of disabilities (Labour Code revised), and exemption of income taxes in favour of persons with disabilities employed on a contractual basis (Law No. 519/2002).

- Right to work and correlated rights: regulation of the various types of labour contracts (provisional, part time, work at home, predefined period) under the Labour Code modified in 2003; the right of any employee to establish or join a union without restriction, particularly related to nationality or previous authorization (The Union Act No. 54/1991 modified in 2003); guaranteed union-related rights for public servants (Law No. 344/2002 on the status of public servants); employees' right to a compulsory 42 days' postnatal leave (2003); workers' right to protection of the debts owed to them in case of their employer's insolvency, by instituting a guarantee fund.

On the other hand, non-conformity cases, which should stay monitored until they are solved, were found in relation to such rights as:

- Right to health and safe working conditions (regulation): lack of coverage for freelancers and housekeeping workers (art. 3.2);

- Right to access to health: high rates of child and mother deaths (17.3 deaths with 1000 babies born alive in 2002) and the alarming conditions in certain psychiatric hospitals (lack of resources and ill-treatment cases) (art. 111).

Other cases refer to the unsatisfactory level of family services (art. 16 – family rights), the minimal salary (art. 4.1), the 15 days' notice in case of dismissal



irrespective of seniority (art. 4.4), education and vocational training of persons with disabilities, the impressive number children with disabilities not enrolled in schools (art. 15.1), the practice of child labour through the literal application of the legislation (arts. 7.1 – 9), or the practice of poorly informing the employees' representatives in cases of collective dismissals (only the reason and the number) as well as the lack of provisions related to the sanctions to be applied in cases of failure to observe the provisions related to consultations (art. 29).

Romania became a party to two other conventions in the field of social rights, namely, Convention No. 102/1952 of the International Labour Organization on the minimal norms of social security, ratified under Law No. 115 of 24 April 2009, and Council's of Europe European Code of Social Security, adopted in Strasbourg on 16 April 1964 and in force since 17 March 1968, ratified under Law No. 116 of 24 April 2009.

There is a close connection between the two instruments, one universal and one regional, respectively, on the one hand, and the European Social Charter revised, ratified by Romania under Law No. 74/1999 and in force since 1 July 1999, on the other hand.

Thus, article 12 paragraph 2 of the Charter stipulates that the Contracting Parties commit themselves to maintain the social security system at a satisfactory level at least equal to that necessary for the ratification of the European Code of Social Security.

Following the general provisions included in Part I, Parts II – X refer to nine traditional branches of social security, namely, medical care (II), sickness cash benefit (III), unemployment benefit (IV), old-age benefit (V), work accident and occupational disease benefit (VI), family benefit (VII), maternity benefit (VIII), invalidity benefit (IX), survivor's benefit (X) while each specifies the risk it covers, the protected persons, the benefits to be granted, eligibility conditions, the benefit quota, the period of time during which it is granted and the duration of the waiting periods.

Other two parts refer to the calculation of the periodic payments and establish the percentages of the salary income achieved before the occurrence of the risk to be covered by the periodical payment (Part XI) and, respectively, its basic value when the payments are suspended, including the procedure for the exercise of the right to appeal and the rules governing the financing and the management of social security systems (Part XII).

The Code, which Romania signed on 22 May 2002, is to be ratified after the States have accepted the obligations provided for in Part I – General Provisions, Part XI referring to the calculation of periodical payments, Part XII including common provisions corresponding to those Parts from II to X specific to each

insurance branch whose obligations they accept, and Part XIII – Miscellaneous Provisions.

It is worth mentioning that the procedure confers the Code a high degree of flexibility for it allows States to ratify it even though the required level hasn't been attained in certain branches.

For instance, the provisions in Parts II – X are not all compulsory but six of them, under such circumstances that the part referring to medical care (II) counts as two parts while the one referring to the old-age benefit (V) counts as three parts.

As far as the control mechanism, regulated under arts. 74 and 75 of the Code, is concerned, the Code provides for the obligation of annual reports to be submitted to the Council of Europe Secretary General, elaborated on the basis of printed forms specifying the information and the statistic data to be communicated.

So far, the European Code of Social Security has been ratified by 20 States, among which, recently Romania, which shall have to submit annual reports on the fulfillment of the standards included in the Parts it ratified, namely, Part II – Medical care, Part III – Sickness cash benefit, Part V – Old-age benefit, and Part VIII – Maternity benefit and their corresponding provisions.

Moreover, the annual report, possibly accompanied by other information as well, shall be also submitted to the Director General of the International Labour Organization, who in turn forwards it to the Committee of Experts on the Application of Conventions and Recommendations, ILO's competent body, who examine it and formulates conclusions.

In fact, this is an associated control system between the Council of Europe and the International Labour Organization. The explanation lies in the nature and the origin of the Code and the fact that this treaty was elaborated based on the provisions of ILO's Convention No. 102/1952 on the minimal standards of social security, an organization which, as a matter of fact, took active part in the elaboration activity.

It is worth mentioning that the two instruments, the Convention and the Code, have an almost identical content and have been ratified, in general, by the same States. This is the reason why they were ratified by Romania on the same day (24 April 2009) and symmetrically in terms of the Parts it committed itself to be bound to.

Ten years ago, giving a reply to those using the pretext of economic globalization and the trend to remove regulations in order to invoke a claimed contradiction between social rights and the market economy, Pierre-Henri Imbert, in his capacity as Director of the Council of Europe Human Rights Directorate, warned about the fact that a re-thinking of our democracies was necessary, for “the social is a necessary component element of economic growth and development, as

well as one foundation of democracy; the Social Charter, a minimal base acknowledging and safeguarding the fundamental rights, cannot therefore be an obstacle against development or the market economy, since it has to do with what is fundamental, while a Europe of human rights would be unaccomplished without this social dimension”.

These words have kept their vividness undeterred and this is the reason why they should be reasserted and, above all, taken into account for the elaboration of policies and strategies in this period of economic crisis as well as in the future.

The notion of globalization refers to a series of changes at global scale that radically modified our lifestyle and our economic activities: international economic relations grow more and more important, thereby leaving an ever stronger imprint on the relations characterizing the domestic markets; economic competitiveness on the global market is the measure of a society's success; the factors of production – the capital and the labour – are characterized by different mobility and dynamism; the new technologies modify the working methods and relations; the economic, social and cultural sectors of national societies, which are influenced by globalization, evolve unlike the traditional social structures and categories.

In numerous countries, the high unemployment rate is the expression of a structural crisis that is undoubtedly the result of the new conditions characterizing the world's economy, but is at the same time the sign of a divorce between the economic growth and the development of the labour market, a sign that the relations among the factors of production have changed, human work being of lesser importance, a sign of the mutations having occurred with the economic systems and the demand for consumption. The notion and the reality of work have started to change. A lifetime work is being substituted by a multiple career; new working environments are being created as a result of the fact that atypical activities (temporarily labeled as such) are emerging and evolving and so is remote work as well. The training of the young who enter the 'work world' becomes more and more important, but it proves insufficient to guarantee the conservation of work; they are workers who never cease to acquire new qualifications.

The demographic evolution shows that Europe is characterized by the increasing importance of elderly persons, a process that entails more and more difficult problems in terms of pension systems, irrespective of how they are organized, as well as in terms healthcare systems. The European societies should undertake such responsibilities in new and efficient ways, based on their social traditions and the observance of the obligations assumed under the treaties. Noteworthy changes have occurred in the structure of families as well. One can notice, on the one hand, that the number of one-child families is increasing, while on the other hand, the number of one-parent families is also increasing, most often

the parent looking after the child being the mother. Problems are also arising in terms of the cohabitation of generations. This is not only about the structural change of society, a differentiation and a fragmentation of the various lifestyles, but also a phenomenon bringing new, additional challenges in front of the social systems.

Bearing in mind these considerations, two conclusions come out. The first is that, given the economic changes, the present and the predictable ones, it is clearer than ever that social rights necessarily complete the civil and political rights. Secondly, in the framework of a globalized and rapidly evolving economic system, social policies have focus, at the national and the international levels, on finding those forms that are most effective. They have to find the most effective forms of organization in terms of distributing the outcome of work among the employees, the social norms and profit.

From the point of view of a global society, we are facing the alternative of either jeopardizing social cohesion or using the opportunity of a new social status.

The causes and the effects of the new economic and social challenges are national and international. The multitude of levels of economic development, the balance between each country's mobilization and international interdependence, call for adequate responses and strategies.

For the entire continent, the European treaties are a reference framework and that 'base' indispensable for the elaboration of new instruments – legislative and contractual, national and European – capable to facilitate the diminution of the adverse effects, at economic and social levels, entailed by the mutations under way, as well as capable to prevent unfavourable consequences with a high degree of effectiveness.



## RESEARCH ABOUT LEARNING MOTIVATION AND THE OPTIONS FOR THE FUTURE JOB FOR SENIORS

CARMEN RUSU<sup>1</sup>

### *Abstract*

The ability of individuals to know and learn is big enough that we mustn't censor the multiple resources of education that can take the form of so many other institutions from our society. When they want to know, people have reasons and intentions, and that's a consequence of a long process of reflection. This article presents the conclusions from a study about students' motivation to work in the studied field or in another. The started point was the decision of the Romanian Agency for Quality Assurance in Higher Education to assess the confidence of a faculty from the number of graduates who want to work at least two years in the studied field after they've graduated. The research was realized on 90 students of the three sections of the Faculty of Psychology and Educational Sciences (Psychology, Special Psychopedagogy and Pedagogy), from University "Alexandru Ioan Cuza" of Iasi and highlighted the extent to which the three dimensions of motivation (valence, expectancy and instrumentality) and the two factors that determine it, intrinsic and extrinsic, are responsible for the future choices of students for a job.

*Keywords:* student education, diagnostics of learning motivation, intrinsic and extrinsic motivation, interest-attitude for a job.

Learning is one of the forms of human activity that has both purpose and reason as his own. According to the Dictionary of Education, "learning has its own purpose, employed at a level of adaptive end, sent to his subordinate actions (writing, reading, etc.), designed and constructed under specific motivations" [Cristea, 1999].

In the last forty years, researchers have studied student motivation and have learned a great deal about:

- What moves students to learn and the quantity and quality of the effort they invest;
- What choices students make;
- How student motivation is affected by teacher practices and school management;
- How motivation develops;

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The purpose of the study was to examine students' learning profile with respect to their intrinsic and extrinsic motivation, valence, expectancy, instrumentality and job orientations.

### **Theories of motivation relevant for research**

If we refer to the general sense of the term, *motivation*, introduced in the early twentieth century in psychology, means energy dynamic issue of human behavior. After Cosmovici A. (2005), motivation is defined as “impulsive and rational process that occurs when an individual seeks to satisfy specific needs and desires”. In a large sense, motivation integrates needs, interests, intentions, tendencies, ideals underlying the human condition and the achievement of certain actions, deeds and attitudes.

Abraham Maslow developed the Hierarchy of Needs model in USA between 1940 and 1950, and the Hierarchy of Needs theory remains valid today for understanding human motivation, management training, and personal development. Physiological needs such as oxygen and food are at the base of the hierarchy, followed by safety, belongingness, and esteem. Only when these needs have been satisfied can humans fully realize their potential. In realizing their potential and achieving everything they are capable of, an individual becomes a self-actualized person.

Alderfer (1969) considers that there are 3 types of needs: existential (E), relational (R) and growth needs (G). The existential needs are satisfied with decent working conditions, safety, etc; the relational needs involve informal and formal relationships with colleague, friends, leaders and subordinates, and the growth needs relate to people's needs for growth, development, fulfillment of creative potential.

Another model is that of McClelland's achievement motivation, who consider that people make choices in life, according to 3 categories of needs: for achievement, affiliation and power. Knowing what is important to someone, we can know what will turn to and what will motivate him more. Learning to know and learn to do would be replaced by learning to be oriented towards learning.

Herzberg, with Mausner and Snyderman (1959) propose a bifactorial theory of job satisfaction which will be later adapted as a motivational theory. He did a study based on structured interviews in which respondents were asked to describe the work experiences they felt very well or very bad and the duration of these states. The answers of this study were that there are two categories of factors present in the institutions: some of them motivators – called intrinsic, for example: events associated with positive attitudes towards work, etc. and some hygienic, of

dissatisfaction, or extrinsic: events associated with negative attitudes towards work related to the context of work, interpersonal relations, working conditions, etc. Based on this data, Herzberg proposed two psychological dimensions: “satisfaction – no satisfaction,” and “dissatisfaction–no dissatisfaction”. He argued that the motivator factors contribute to the experience of satisfaction – no satisfaction and the hygiene factors contribute to the experience of dissatisfaction – no dissatisfaction.

Motivation can be also seen in terms of expected outcomes or rewards. This orientation, mainly developed by Vroom, is called the expectations theory. This model postulates that people take account of the results to be expected and the strategies to be expected that will lead to desired results. People will be so motivated to choose the most appropriate strategies to produce more favorable results. In this model, if a person wants a promotion and expect for this to work harder and longer, then, that person will be motivated to put more effort to achieve the desired result. The important factors in Vroom's model are:

- Expectation – perception of someone who expects that a certain result will be obtained after a result of certain actions. Result - refers to the purpose of the chosen behavior. Results may occur on first or second level. For example, someone may decide to work harder in order to finish early (first-level outcome), leading to a high rating (second-level outcome).

- Valence - is attachment or preference of a person for a particular result. Valences can be positive (pay, promotions and interesting tasks) or negative (reprehension or transfer).

- Instrumentality – is the perceived relationship between the results of the first and second level. This can be quantified with values between 1 and -1. If the result of the first level (work completed earlier) always leads to a positive evaluation (second level outcome), instrumentality to each other is 1. This result may be closer to 0 when there is no perceived relationship or instrumentality, or -1 when it is considered that the outcome of the second level can't be achieved as a result of the first level.

Processes involved in theory expectations includes analyzing a situation and determinate the value of certain results. If valence is high, and that person believes that between actions and desired outcome is a close relationship and has the ability to perform the action, will have a strong motivation to choose and perform that action. Moreover, even if a particular outcome valence is high, if the person cannot identify the action by which it can obtain the result or feels that it does not have the skills to perform it, motivation to engage in action will be predictably low.



Specialists concerned with organizational issues such motivation recognize that certain aspects of an activity itself can create prerequisites for the individual to be satisfied with it, without receiving external incentives.

### **Theoretical considerations on the relationship between motivation and learning**

Although very important, but controversial and wide, the concept of motivation is required only in the twentieth century. Despite many approaches, most researchers think about the motivation, as a system of heterogeneous and dynamic psychological factors that determine an individual's behavior and activity [Verza, p.220].

Motivation has long been considered by psychologists and educators as an important factor that affects student learning and achievement. It is a common contention that adaptive motivational orientations facilitate learning while maladaptive ones impede it.

Learning motivation is a specific form of motivation, considered in relation to the learning activity and human cognitive activity. Learning motivation was the subject of several scientific concerns researchers J. Piaget, H. Lowe, R. Gagne, J. R. Kidd, etc.

Learning motivation is a general notion that includes “processes, methods and means that determine personality productive cognitive activity, the active acquirement of educational content. It allows personality to establish not only the direction but also methods for various types of learning activities, to train in this process the volitive affective sphere of personality [Kidd, 1981].

To understand the motivation, institutions must first understand why people behave a certain way and have certain reactions in unpleasant situations. Motivation is an internal process and not an imperative that can be imposed from outside. Knowing a person's motivation is equivalent to finding the answer to the question 'why?' does him something. The answer is difficult because the causes are multiple and can't be reduced to external stimulus. For some psychologists, the reason is the generic name of any component of motivation being defined as a psychological phenomenon that triggers, directs and supports energy activities.

Undoubtedly, “life is a universal educational environment”. The Czech educator Jan Amos Comenius affirmation, that the entire life is a school that supports this view. However, the human nature develops in predictable directions: towards a greater independence and a greater personal responsibility. The trend is towards development 'self, the self-regulation, autonomy based on acceptance the control of external forces [Kidd, 1981].

John Dollard said: “The learner is a person who wants something, the learner is a person who sees something, the learner is a person who does something, is a person who acquires something”. Note that all these verbs are active. At all ages, learning is the active part, not the passive part of the process: the learner open himself, work hard, accumulate, incorporate experience, report it to his previous experience, develop the experience, show their personality. The essential part of teaching and learning is how to help the learner to actively engage in this experience, progressive, transformative, painful or refreshing, that we call learning. In this sense may mean targeting, activation, vivification, challenge, involvement or other mechanisms with intrinsic-extrinsic nature.

### **Methodological research**

Starting from the conclusion of Romanian Agency for Quality Assurance in Higher Education the universities in Romania doesn't motivate students enough and we mean not only attractive facilities and scholarships, but also the quality of information received, conditions of practice or the possibility of a job market integration. Therefore, it is considered that an internal evaluation, provided by students, could be for the managers and school leaders an answer to improve the educational process. According to the Romanian Agency for Quality Assurance in Higher Education, students satisfaction can be ensured by respecting actual requirements and students objectives A university will receive full credibility if the number of graduates who will work in study after graduation, for at least 2 years will be more than a half.

According to statistics, most graduates are unsatisfied with how the university prepared them for the transition to employment. More than half say that vocational guidance enjoyed in college was often only formal. The link between school and labor market is weak, and opportunities to learn by applying knowledge gained in formal situations are rare. Practical applicability of the courses is questioned by a half of the graduates surveyed.

The principal aim of this research was to explore the interrelations among those four variables to decide which is essential in learning process and a future choice of a job. The subjects were seniors from the Faculty of Psychology and Educational Sciences, a total number of 90 students – 30 Psychology, 30 Special Education and 30 Pedagogy, 12 boys and 68 girls.

The questionnaire on learning motivation in students contain 3 subscales, each subscale containing 14 items, 7 for intrinsic values and 7 for extrinsic values, with 3 different response options for each subscales.

Construction of questionnaires was based on Vroom's theory developed around three basic elements: expectancy (effort-performance relationship), instrumentality (performance-outcome relationship) and valence (results value). Items of each subscale were equally correlated with intrinsic and extrinsic factors, after the theory of Herzberg.

The 14 aspects surveyed:

- 1) The content of school work (which is present in courses, seminars, practice);
- 2) Opportunities to use and develop the creative capacities;
- 3) Passion for their chosen field;
- 4) Educational aspiration level: promotion to higher categories, selection into work teams in college;
- 5) Personal affirmation: integration and hierarchical promotion team;
- 6) The performance: to be the best, to win;
- 7) Fear of failure: failure, defeat, accidents, enemies, security trend;
- 8) Norms of school work: laws, statutes, regulations;
- 9) Material benefits and features: scholarships, awards, diploma;
- 10) Social climate: family, peers, teachers, press, radio, TV, etc.;
- 11) Social prestige: of the faculty, of the teacher, his own prestige;
- 12) The leadership style applied by teachers, head of year, administration;
- 13) Life-school relationship: the possibility of being an honors student and fulfill other roles;
- 14) Material conditions: courses, rooms, schedule.

The first questionnaire subscale measured *the valence* – the emotional dimension of motivation, expressing attraction or rejection to intrinsic or extrinsic factors interviewed. This dimension of motivation helped us to identify the most important and the least important aspect in student learning motivation.

*E.g. item: "In your work, providing opportunities for developing skills in a creative way you think it is:*

- a) very important b) a little important c) unimportant.

The second subscale of the questionnaire measured *the expectancy* - the cognitive dimension who expressed the subjective probability of getting a result.

*E.g. item: "I believe that faculty norms (laws, statutes, regulations, etc.):*

- a) correspond to your expectations b) correspond only sometimes to your expectations c) do not correspond to any of your expectations.

The third subscale of the questionnaire measured *instrumentality* – a parameter that reveals the level where a valence can be achieved or not by themselves. This dimension of motivation helped us to identify the aspect that may/may not be controlled by the subjects when we talk about school motivation.

E. g. item: "In achieving the desired results, the material conditions provided (classes, rooms, material basis, schedule, etc.):"

- a) fully depend on you b) depend equally on others and you c) fully dependent on others

The final question of the questionnaire is the option to work in the area over the next 2 years after graduated and the motivation of the choice. This will help to identify if those who are motivated intrinsic or extrinsic in the learning process, will be also motivated mostly intrinsic or extrinsic when they'll choose a future job.

#### Research and discussion

After collecting the data and entered them into the database using SPSS, it was calculated the internal consistency coefficient - Alpha Cronbach for each subscales of the questionnaires, obtaining values that validate the questionnaire (subscale 1 -  $\alpha = 0.676$ , subscale 2 -  $\alpha = 0.753$ , subscale 3 -  $\alpha = 0.698$ , total score questionnaire -  $\alpha = 0.665$ ).

For the first subscale of the questionnaire measuring *valence*, statistical processing for all students ( $N = 90$ ) have identified a significant percentage that attaches great importance to: the possibility of developing skills in a creative way - 83.3% (item 2) and the maintenance and develop of passion for their chosen field - 78.9% (item 3). Equally important are the extrinsic aspects in learning motivation, for 67.8% of students matter material advantages and facilities offered (item 9), 66.7% - the social climate generated by the family, press, media, etc., 63.3% - can be simultaneously a student with honors and fulfill other social roles and 64.4% provided the material conditions (accommodation, classrooms, etc.).

The results for the second subscale - expectancy (effort-result rapport), identified a significant percentage of students who feel unsatisfied by: the possibility to be the best, to win, to advance - 22.4%, the norms and regulations established by the faculty - 43.3% and the material advantages they can get - 32%.

The lack of continuous and real support of the faculty on the problems that students interact daily will decrease motivation and implicitly, the performances. Studies have shown that many people give up the desire to continue an activity without satisfaction.

The subscale who evaluated the instrumentality have identified the aspects that in students vision can be resolve only with their forces: maintaining the passion developed for the studied field - 64.4%; the possibility of personal affirmation - 54.4% and the necessity to be the best - 46.7%. Instead, theoretical and practical contents of activities are totally dependent on others (institutions' managers), agree 48.9% of the students from all the departments.

After statistical processing performed in SPSS, using the option Selected Cases, were identified only those students who answered with “yes” to the question “Do you want to work after graduation in the studied field for at least 2-3 years?” With the help of these answers it was created the motivational profile.

The fact that for all the departments was obtained a score above average (Psychology - 93,33%; Special Psychopedagogy – 82.76% and Pedagogy – 89.29%) at the option to work in the studied field, promotes the idea that the Faculty of Psychology and Education Sciences has a high level of credibility among students. The study was unable to control other types of motivation that could have induced a positive answer, such as the need for a job or the impossibility to work in another field, etc. The overall percentage of students who have expressed a desire to work in the studied field for at least two years after graduation – 84.43% (N = 90), is a fact gratifying and encouraging.

Those students perceive as reasons for their choice: the passion for the field, the desire to help people with SEN (Special Education Needs), for experience and progress, because they want to make a career in this field, the need to escape routine, to share ideas, to entertain, to get access to interesting occupations, etc. Those reasons are both intrinsic and extrinsic. The first ones feel an interior motivation for knowledge, are passion for a particular area and recognize the pleasure of learning, no matter other issues. The others must be stimulated from the outside in different ways: money, fame and recognition, awards and prizes, status and privileges, and even bribery, threats and punishments. Extrinsic motivation exists even if satisfaction and pleasure in performing the task is absent.

We note that for students of Pedagogy Department to justify the option of working in the studied field is very important the passion, the interest, the curiosity, the need to broaden professional, and this is the factor that the students are satisfied in a percentage of 43.3%, opposite to the possibility to be the best, to advance and win which is the fact that do not correspond to any of students’ expectations (30%).

The same feature is founded to the students of Psychology Department, where the passion for the studied field is one of the factors most frequently relied on the answers to the last question, and also a very important aspect for a rate of 70.1% of students. Other motivations were: the ability to interact with specialists, to do what they like and what they do best. Unlike the Pedagogy Department, where we identify mostly intrinsic reasons, in this case, there are also extrinsic reasons, for example: their own development, the prestige of the field, the possibility to gain experience and to make a career, etc.

For the students of Special psycho-pedagogy, the mainly reasons are also the passion for the field, the desire to help and interact with specialists or the professional development, the need to establish new social contacts, to enter into

relationships with others, to ensure a status favorable to shine socially. The reasons why some students from Special Psycho-pedagogy Department stated that they don't want a career in this field have been those related to the remuneration and the fact that the field is not what they've believed.

The lack of significant differences between departments reinforce the results for each subscale of the questionnaire and the idea that if there is something who brings dissatisfaction for students is rooted in an outside individual level, but who is interior and specific for the institution that ensure the knowledge of a specific field. The image reflected by the theory, the faculty practice shouldn't be different than they actually are, otherwise the quality of future services will decrease greatly and we will have on the jobs market individuals who remain in the field because they had no other choice.

### **Conclusions and pedagogical implications**

The psychosocial condition of learning at students arises from the need/desire/aspiration/interest of subject to change his professional, social or familial status. The pedagogical approach of motivation is clear from its characteristic as a phenomenon liable to grow and develop. But, the educational process cannot form grounds, but can contribute to their training; the reason is a complicated psychological formation that is built only by the subject. In the educational and socialization process of personality the individual develop formations, such as interests, skills, moral principles, guidelines and self-evaluation. They are building parts used to justify activities and behavior. Therefore, from outside we cannot form reasons, but we can form motivators and with them – the motivational sphere of personality.

In learning process, the individual is exposed to the influence of a complex system of material, social and spiritual incentives, reasoning in the motivation process involved in these activities. Most of the times, in formal education, the goals are set by teachers in the form of requirements and rules which became tasks for students [Cosmovici, 2005]. Many students complete tasks that they do not value all that much simply because they expect some sort of reward (e.g. high marks, a pass, or social approval). Students that undertake learning tasks purely for the sake of getting a reward from others, or in order to avoid some penalty, are extrinsically motivated. An activity is generally considered to be intrinsically motivating if external reward is not necessary for students to initiate and continue that activity. Favorable motivational beliefs are attached to the activity itself. Students who are intrinsically motivated will report that they do not have to invest effort and that doing the activity is gratifying.

According to SDT (Self-Determination Theory) we can describe a person's motivation as a route from demotivation or the absence of motivation, passing through different stages of extrinsic motivation to intrinsic motivation. On this route, the concept of internalization described how motivation for school behavior can be described by a lack of motivation or resentment to passive acceptance to active acceptance and personal involvement.

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### BIBLIOGRAFIE

- \*\*\*, 2000, *Memorandum privind învățarea de-a lungul întregii vieți*, Bruxelles.
- \*\*\*, 2003, *Consilierea carierei adulților*, ISE, București
- Belinda Harris, 2007, *Supporting the emotional work of school leaders*, CA: Paul Chapman, London.
- Chelcea, Septimiu, 1975, *Chestionarul și investigația sociologică*, Editura Științifică și Enciclopedică, București.
- Cosmovici, A., 2005, *Psihologie generală*, Polirom, Iași.
- Crețu, Carmen, 1997, *Psihopedagogia succesului*, Editura Polirom, Iași.
- Deci E.L., Ryan J., 1985, *Intrinsic Motivation and Self-Determination on Human Behavior*, Plenum, New York.
- Gagne, Robert, M., 1975, *Condițiile învățării*, Editura Didactică și Pedagogică, București.
- Kidd, James Robbins, 1981, *Cum învață adulții*, Editura Didactică și Pedagogică, București.
- Locke, John, 1961, *Eseu asupra intelectului omenesc*, Editura Științifică, București.
- Lowe, H.(1978), *Introducere în psihologia învățării la adulți*, Editura Didactică și Pedagogică, București
- Maslow, A., 1970, *Motivation and Personality*, Harper & Row, New York.
- Paolo Federighi, Simona Sava (coord.), 2001, *Glosar de termeni cheie în educația adulților din Europa*, Editura Mirton, Timișoara.
- Verza, Emil, 1981, *Psihologia vîrstelor*, Editura Didactică și Pedagogică, București.
- Wigfield, A. & Eccles, J., 2002, *Development of achievement motivation*, Academic Press, San Diego.

## **ACTIVE LEARNING IN ADULT EDUCATION. AN EPISTEMOLOGICAL AND PRAXEOLOGICAL APPROACH**

MAGDA-ELENA SAMOILĂ<sup>1</sup>

### *Abstract*

Based on the theories of the constructivist paradigm, whose supporters believe that the socio-cognitive conflict plays the leading role in the access to knowledge, the contents of the paper highlights the need of conducting an active experiential learning in adult education process. The capitalization of life and learning experience represents a source of knowledge, but it can also constitute, a real epistemological obstacle, whose surmounting calls for deconstruction, reconstruction. The change of the main interest from “how much one learns” to “how does one learn”, and to the responsibility of the journey one has made, can ultimately lead to self learning, self training. The way and the aim coexist. The quality of the product depends on the way the whole process is organized. Adult learning performance is determined by complying with a set of laws, without which the access to finality is just a utopia.

*Keyconcepts:* norms in adult education, active learning, experiential learning, socio-constructivist paradigm

### **Characteristics of Active Learning from the Point of View of the Constructivist Paradigm. The Model of Triangle Teaching according to Jean Houssaye and Yves Bertrand**

Referring to theoretical and action issues, supporting the need for adult education, from the point of view of the principles of the socio-constructivist paradigm, the present paper underlines the role of access to knowledge through active learning activities, enabling conscious discoveries, interpretations, reconstructions. By moving the focus from how much to learn on how to learn, the responsibility of the mileage finally determines self-learning, self-study. Thus, target and path coexist. The way the whole process is organized determines the quality of the product.

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Describing the characteristics of teaching, Houssaye and Bertrand propose to address to the following components, which are interrelated, essential to any learning process: *the educated, knowledge, teacher* (Houssaye), *the educated, knowledge, society, other people, outside world, the universe* (Bertrand).

Houssaye believes that there is always a connection among the educated, knowledge, teacher. But, a privileged relation exists only between two of these elements. The third is inferior, it becomes known more by its absence than by reciprocity, but without it, there is no relation. Its role is defined and it comes to the fore through the others, the real subjects, being third persons.

Therefore, to the process of teaching corresponds the axis teacher-knowledge. The educated is the third included part, having a passive role. The intellectualist paradigm in education fosters this relationship. Socrates, Herbart, Erasmus, Comenius develop the idea that the role of the content in the educational approach is a priority.

Training favours the axis teacher – the educated, now knowledge is the included third part. The formativist paradigm that corresponds to this axis is represented by Montaigne, Locke, Spencer who consider that education does not limit itself to transmitting information, what is important is the formative relationship.

Learning favours the axis the educated-knowledge, now the teacher is the third included part. The constructivist paradigm corresponds to this concept, making possible „a balance of extremes – intellectualism and formativism” (Momanu, 2002, p.40).

The constructivist paradigm thus imposes a change of perspective, a *reframing* of the pedagogical point of view from ontological to epistemological, from reproductive theory to the constructive one, from “socio-technological concepts to autonomous models, from a monistic to a pluralistic understanding of science” [Siebert, 2001, p. 44]. What is essential is the identification and the proper use of methods and means to promote the direct access of the educated to knowledge.

Reece and Walker established how learning methods contribute to achieving certain types of aims, depending on the psycho-behavioural field of membership [2004, p. 106]:

Method	The Psycho-behavioural Field		
	Cognitive	Affective	Psychomotor
Presentation (explanation)	✓		
Demonstration	✓		✓

Talks, debates	✓	✓	
The Method of Projects	✓	✓	✓
Practical Works	✓	✓	✓
Brainstorming	✓		
Role Play	✓	✓	
Simulation	✓	✓	✓
Case Study	✓		
Independent Work	✓		✓
Team work	✓	✓	✓

Therefore, it is efficient the use of strategies which determine active learning, making the connection to a familiar problem for the person who learns, thus enhancing the formation of new competence. Learning is not a mechanical process of accumulation of knowledge, quantitatively measurable, which follows the principle *The more, the better*, but it represents a process determinat by the allocation of meaning. According to the followers of the constructivist paradigm, there is no only correct solution in the act of learning, but there are many possible temporary solutions. Learning is always open to new possibilities, new alternatives to the same extend that teaching is not a linear process, transmitter-receiver, but a "circular recursive perspectivist interaction, during whose function, assumptions occur and they are more or less justified, selective perceptions, reductionist schemes" [Siebert, 2001, p. 14].

One of the most useful descriptions of the adult involved in learning belongs to the American theoretician John Dollard, who claims that the person who learns is one who wants, does and gains something. The fact that all these verbs are active underlines the idea of the supporters of the constructivist paradigm, according to which learning is, above all, a dynamic process which generates conversion. Reorganization, restructuring always occur: "it is not difficult to add new pieces of knowledge, but to reorganize what you have learned" [Kidd, 1981, p.13]. This reorganization coincides with the appearance of a conflict state, which becomes the

source of learning and the key element of building knowledge. Thus, the problem is not to acquire an experimental culture, but “to remove the obstacles already met in everyday life” [Bachelard, 1949, p. 37].

### **Principles of a Formative Approach for Adults**

The teaching principles coming from the constructivist mentality have the potential to support and stimulate active learning processes, autonomous and situational.

Roger Mucchielli identified a series of rules which are to be respected while creating a teaching approach for adults: *An adult can learn better if: one is oriented even from the beginning of learning towards a clear purpose, one takes part and is responsible for all the steps of his own learning, one is integrated in a learning group, one's life experience is valued.* These principles will be explained in detail, being supported by relevant theories which will justify the necessity of respecting teaching rules according to Mucchielli.

*An adult can learn better if: one is oriented even from the beginning of learning towards a clear purpose.*

It has been proved that the possibility of knowing the result of study has a positive effect on performance. Learning takes place only when the adult understands that his needs can be satisfied only by specific ways of action. In learning activities where the adults have been informed from the start about the expected results, significant progress was made, proving the fact that efficiency is connected to the person becoming aware of the purpose of the activity which has in view a specific situation, a well-defined behaviour. Moreover, when the adult's need for learning is linked to fulfilling that person's needs, no matter the level attained, performance in learning is guaranteed. Probably at this level we can speak about the theory of extatic education of George Leonard. Satisfying the need for knowledge determines actions which lead to voluntary, unconditioned learning.

*The adult leans better if one takes part and is responsible for all the steps of his own learning.*

In the V<sup>th</sup> century B.C., the Chinese philosopher Lao-Tse defined in simple words the essence of experiential learning: *If you explain it to me, I will listen, if you show it to me, I will understand, but if you let me experience it, then I will learn.*

A great amount of learning at an adult age is connected to the changes of tasks or roles that a person has to fulfill. Changes in evolution are numerous: “the adult becomes independent, identifying and preserving livelihoods, then one chooses a life partner, one becomes a parent and acts accordingly, one interacts with

community and society, one enlarges one's duties as a citizen, one obtains satisfaction in old age" [Kidd, 1981, p. 15]. Each kind of change in the economic or social status requires learning.

The use of strategies, of teaching methods that determine a larger number of activities in order to be involved, to participate, to make the adult responsible for discovery and validation knowledge will be essential prerequisites that will promote active learning.

The process of active learning has been defined as the activity which favours real opportunities for getting involved, self-expression and active listening. According to Meyers and Jones, the structure of an experience of active learning supposes the existence of three intertwined categories: elements, resources and strategies. The elements refer to the learning process which takes place effectively, based on dialogue, active listening, reading activities, writing, reflection. The resources imply the technology used while teaching, educational programs etc. The strategies represent those methods, procedures, ways of organizing that favour active learning: getting the adults organized in learning groups, case studies, simulations, problem solving, role play. During a process of active learning, "adults must discuss while and about learning, they must be given the opportunity to write about what they have learned, they should be capable to narrate previous experience, to apply the learned things in everyday life" [Meyers, Jones, 1993, p.21].

What is valuable is not the accumulation of knowledge, but *how, when* and *what* becomes updated, when it must be so. Education could become "an *autopoietic* system, meaning a self-regulating spring for cultivating individual schemes of thought or of conduct, which proved to be efficient and led to greater autonomy" [Cucoş, 2002, p. 41].

Moving the focus from *how much is* learned to *how it is* learned, the responsibility of *the road* map determines self-instruction, self-study. It is preferable a logic of becoming to one of being. The priority of eternal truths are the movements of active, reversible search. "No human being, no group will be judged according to an established result, but taking into account the purpose" [Dewey, 1948, p. 220].

*An adult learns better if one is integrated in a learning grup.*

The followers of the personalist current considered necessary learning achieved through continuous reporting to the other, the quality of the relationship between the participants provides the quality of the entire process. By including the adult in a learning group, it is created a real opportunity of socializing, of exercising the habit of taking part to one's self-teaching through cooperation while making a progress.

Alan M. Thomas makes the distinction between the role as a *member* of a learning group and that of a *student* [*apud* Kidd, 1981, p. 46]. The main characteristic of the role as a student is the fact that one is completely dependent on the authority of the educational systems of knowledge, on the competence of the teacher. The role as a member is the one when adults create a group of any size, in order to achieve a formative common goal. On one hand, being part of a learning group, the adult is not dependent on the authority of the teacher. The need to learn is a normal consequence of action and it is considered its component part. On the other hand, it is known the desire for satisfying these opposite needs – dependence and independence. To a certain extent, the adult feels the need to lean on authority, to have strict tasks, to have a submissive behaviour that would lead to taking responsibility, but in the same time, one wants to dominate, in order for the others to recognize that he/she is *someone*. Sometimes, one of these needs is stronger, sometimes the other, "but they are both present" [Kidd, 1981, p.135]. We are facing the paradox identified by Bertrand, which underlines the need for establishing a balance between the non-directive education of Rogers and the directive one, based on learning through imitation.

In adult education, the participants do not learn exclusively from the teacher, they do not react only at an *informational* input, but they themselves influence the behaviour, the atmosphere, the mood of the person who teaches. A training session is "an enactment in which each person plays a role, in which the participants learn more from each other than from the director" [Siebert, 2001, p. 31]. Access to different sources of information makes the teacher not have the most important role in the dissemination stage, being needed in the process of decryption, of interpretation.

*The adult learns better if his life experience is valued.*

Starting with adulthood, previous experience is a source of enlarging knowledge. Individuality introduces personal notes in the educational evolution. This is the reason why new knowledge should be connected all the time to previous experience. Learning supposes the existence of *previous processes*, knowledge is based on the existent cognitive structures, while experiences relate to other experiences. „Every person does not come only with what one knows to do and has pieces of information about, but one also brings beliefs, one's personal system of representation of the world (...), influences, daily news that reminds us we are not the same, not for one moment" [Șoitu, 1997, p. 115]. Recording basic predictions about future contributions to education, the teachers of adults will create new opportunities which will allow exploitation of experience of life and learning for each participant.

One should consider all noticeable aspects, connected to experience, to adulthood. First of all, it is necessary to exploit the experience of life and learning of an adult while training that person, on the other hand, the role of access to knowledge through *experiential learning* should not be neglected. Learning and action lead to specific solid accumulation. Thus, learning becomes a part of life until finally, the borderline between life and learning disappears. In a nutshell, life itself becomes “a permanent learning experience” [Lindeman, 1945, p. 63].

Kolb brings one of the most useful descriptive models, which can be applied to adults, based on experiential learning. He mentions four intertwined steps, each stage has an approach, which is specific for the person involved in learning: true experience is connected to the active style (*feeling*), reflexive observation is related to reflexive style (*watching*), abstract conceptualization – theoretic style (*thinking*), active experimentation- pragmatic style (*doing*) [Kolb, 2002, p. 67]. The task of the teacher is to create those opportunities for individual expression which will foster learning according to the specificity of each participant.

### **Practical considerations**

In 2006, I carried out a survey on 200 adults, from the countryside and the urban area, they were in two different centres for continuous training. The purpose of my research was the identification of the role of active learning in increasing adult learning performance.

While choosing the research people, I tried to balance the experimental group with the one of control, by using the technique of parallel groups. Therefore, two groups of medium, comparable capacity were identified.

#### *General hypothesis*

Adults have better results if teaching is made by using active-participatory methods compared to the situation when access to knowledge is facilitated through expository, responsive methods.

#### *Specific Hypothesis 1*

While initially testing the persons in the two groups (the control group and the experimental group), they had similar results.

#### *Specific Hypothesis 2*

Experimental group subjects, who learn by active methods, get superior results at the final evaluation compared to the control group learning by expository methods.

#### *Specific Hypothesis 3*

The performance obtained at the final evaluation is superior to the one from the initial evaluation both on the entire research members and on the analyzed groups.

Research variables

- a. Independent variable: learning methods used
- b. Dependent variable: the performance of the subjects

Based on interpreting these results, the two research groups were formed: the experimental group in which active methods were used to transmit new knowledge and the control group, in which expository, responsive methods were involved.

Tools used

The subjects' performance was measured through the assessment marks obtained by a test conducted on the basis of a docimology test with semi-objective items, short answer time, a test given both at the beginning and at the end of the training activity.

The analysis and interpretation of results was made by the use of the specialized program for psychological statistics SPSS 10.0 for Windows. The following statistical analysis were carried out:

(a) Test t of significance of the difference between the averages on independent samples, comparing the averages to the variable performance obtained in the initial test, according to the group variable (experimental group – control group);

(b) Test t of significance of the difference between the averages on independent samples, comparing the averages to the variable performance obtained in the final test, according to the variable methods used;

(c) Test t of significance of the difference between the averages on dependent samples, comparing the averages to the two tests (initial and final evaluation) on the research lot and for each of the two groups (experimental group and control group).

The grades of the adults who learned using active methods are significantly higher than those obtained by the adults who used expository methods. By comparing the graphics of the two stages of evaluation of the two groups, the results are the following:

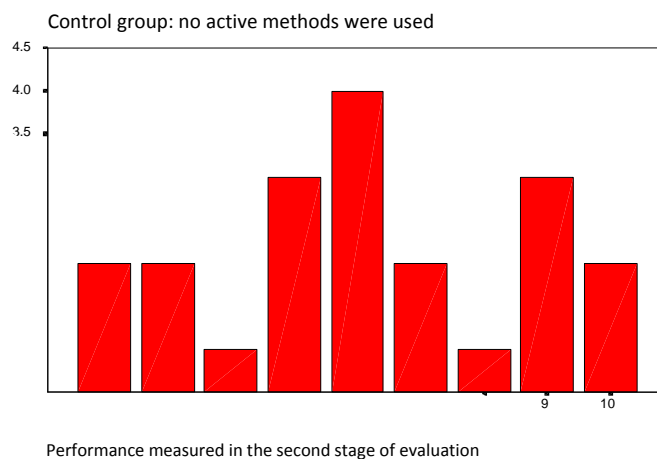


Figure1: *Performance measured in the final evaluation, control group*

In the case of control group (Figure 1), consisting of adults who learned using expository methods, the distribution of the results is of *the Gaussian type*, the curve is like a bell, with a maximum density of frequency in the middle and with minimum density symmetrically placed in the extremities; most subjects obtained grades of 5, 6 and 7, the very small and very high grades were given to a reduced number of subjects.

In the case of the experimental group (Figure 2) containing adults who learned using active methods, most subjects obtained marks higher than 7. A small percentage obtained grades under 7, the results distribution curve is inclined towards the right side of the scoring scale, evolving towards a *J-shaped curve*.

#### *Interpretations*

It has been proved that adults obtain performance in learning, if the following principles are respected during the entire educational process:

- making the most of knowledge experience, valuing it in order to discover new content knowledge (the method of learning groups);
- permanently offering the chance to exercise social roles by establishing multiple interactions with peers (the method of study groups, role play, debate);
- immediate application of new information, knowledge in specific activities (training conducted on real life situations, case study);
- collate acquired information (the method of graphic organizer, debate).



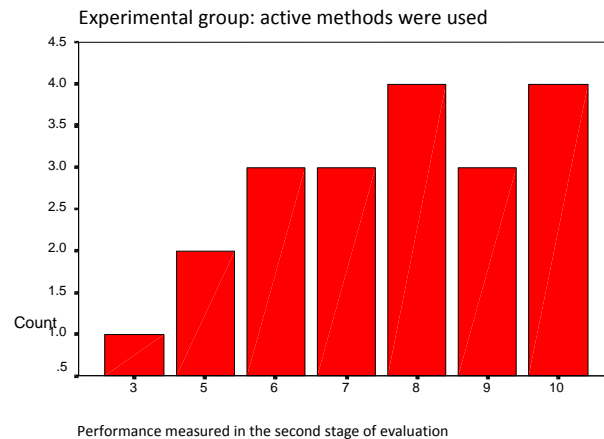


Figure 2: Performance measured in the final stage of evaluation, experimental group

### Conclusions

Even if in real life, in classical, authoritarian or intellectualist methods, there is an activity (an intellectual activity of attention and comprehension) and a motivation (the direct or indirect purpose of learning), in theory and practice, we make the distinction between learning using responsive methods and active methods – participatory, thus separating learning based on conditioning, memorizing, repetition and learning based on exploratory experiments, on developing personal response, on discovery and action. Active-participative strategies involve all situations in which the educated people are not training objects, they become active subjects, taking part in the experiment.

Waiving expository methods of transmitting content is not the purpose of the present paper. The autonomous and responsible character of learning does not exclude traditional ways of teaching and learning. In *The Encyclopedia of Psychology*, from 2006, it was claimed that: “traditional methods and principles of teaching can be profitable if not applied exclusively”.

One cannot argue for the exclusive choice of a specific type of method, based on efficiency previously tried or validated by the others. Continuous reporting of the entire approach and of the used strategies to the learning objectives in the particular context in which the educational process takes place, is prerequisite for achieving efficient and effective learning.

Our environment of life is a living world which is interpreted and built. Educational practice encourages construction, reconstruction and deconstruction, in the same time being in favour of reflexive learning through which people become aware of the possibility of constructing their world. The use of strategies refers to conditions which favour social and professional autonomy for the adult, stimulating teaching and learning as processes involving educational learners who solve and discover problems, interact and influence, due to their own experience, the final stage of knowledge.

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### REFERENCES

- Antonescu, G. G., 1972, *Educație și cultură*, Editura Didactică și Pedagogică, București.
- Bachelard, G., 1949, *La Rationalisme applique*, PUF, Paris.
- Berger, G., 1973, *Omul modern și educația sa*, Editura Didactică și Pedagogică, București.
- Bertrand, Y., 1995, *Contemporary theories and practice in higher education*. Madison, WI: Magna Publications.
- Bruner, J., 1970, *Procesul educației intelectuale*, Editura Științifică, București.
- Chickering, A., Gamson, Z., 1987, *Seven principles for good practice in undergraduate education*, AAHE, Bulletin, 39 (7).
- Cristea, S., 1998, *Dicționar de termeni pedagogici*, E.D.P. R-A, București.
- Cucoș, C., 2002, *Pedagogie*, Editura Polirom, Iași.
- David., C., L., 2002, *Learning Theories, A to Z*, Oryx Press, Westport, Londra.
- Descartes, R., 1970, *Discours de la Methode*, Librairie Generale Francaise, Gallimard, Paris.
- Dewey, J., 1972, *Democrație și educație*, Editura Didactică și Pedagogică, București.
- Encyclopedia of Educational Psychology*, 2006, SAGE Publication.
- Gyllenhaal, H., 1967, *Guide to Styles, Groups, Methods*, Sales Meetings, Londra.
- Hăvârneanu, C., 2000, *Metodologia cercetării in științele sociale*, Editura Erola, Iași.
- Houssaye, J., ed ,1993, *La pédagogie: une encyclopédie pour aujourd'hui*, ESF, Paris.
- Kidd R. J.,1981, *Cum învață adulții*, E.D.P., București.

- Kolb, D., Baker, A.C., Jensen P., 2002, *Conversational learning. An experiential approach to Knowledge creation*, Greenwood Publishing Group. Inc, USA.
- Locke, J., 1971, *Câteva cugetări asupra educației*, Editura Didactică și Pedagogică, București
- Meyers, C., Jones, T., 1993, *Promoting active learning*, C.A., Jossey -Bass Publishers, San Francisco.
- Mialaret, G., 1978, *Principes et etapes de la formation des éducateurs*, vol *Traites des sciences pédagogiques*, PUF, Paris.
- Ministerul Educației și Cercetării, Consiliul Național pentru pregătirea profesorilor, 2001, *Învățarea activă – ghid pentru formatori și cadre didactice*, București.
- Momanu, M., 2002, *Introducere în teoria educației*, Editura Polirom, Iași.
- Mucchielli, R., 1982, *Metode active în pedagogia adulților*, E.D.P., București.
- Peters, R., 1965, *Reason and habit: The paradox of moral education*, in Frankena, William, K., *Philosophy of education*, The Macmillan, Company, Toronto.
- Siebert, H. , 2001, *Pedagogie constructivistă*, Institutul European, Iași.
- Soitu, L., 1997, *Pedagogia comunicării*, Editura Didactică, București.
- Thomas, A., M., 1967, *Studentship and Membership*, in *Journal of Education*, University of Alberta, Summer.
- Văideanu, G., 1996, *UNESCO 50, Educație*, Editura Didactică și Pedagogică, București.
- <http://www.ibe.unesco.org/en/services/publications/thinkers-on-education.html>
- <http://www.learningandteaching.info/learning/experience.htm>
- <http://hal.archives-ouvertes.fr/docs/00/20/12/23/PDF/B-Gendron-emotionalcapital-article04-signature-actualisee05.pdf>
- <http://www.westone.wa.gov.au/toolboxes/equity/site/staff/f.htm>
- <http://ultibase.rmit.edu.au/Articles/dec00/hase2.htm>

## **EDAE-Encyclopedic Dictionary of Adult Education**

MIHAELA MOCANU<sup>1</sup>, OANA PANAITI<sup>2</sup>, LAURENȚIU ȘOITU<sup>3</sup>

### *Abstract*

One of the features of the Romanian culture in recent decades is the multiplicity and diversification of lexicographical works. Lexicographical pluralism is generated both by the demand to answer the needs of a heterogeneous class of readers with relevant working tools and also, by editorial competition. From the inventory of the words of a language to the presentation of the knowledge gained in a specific field, dictionaries mark the transition from knowledge accessible to specialists to knowledge for the masses in the context of an urgent need for information specific to modern world. In this context, the project called „The Encyclopedic Dictionary of Adult Education” appeared, being financed from the budgetary funds of NURC (National University Research Centre), and being currently realized by the Department for Dictionaries & Encyclopedias of "Alexandru Ioan Cuza" University from Iasi. The purpose of this project is to raise awareness on the role of adult education - as part of the general education system - in supporting learning throughout the entire life, individually and collectively. The EDAE project is part of the national and international approaches, having a theoretical basis, offering a conceptual and methodological framework which is specific to the field of lifelong adult learning.

*Keywords:* Dictionary, Adult Education, Andragogy

One of the features of the Romanian culture in recent decades refers to the multiplicity and variety of lexicographical works. Lexicographical pluralism is generated both by the demand to answer the needs of a heterogeneous class of readers with relevant working tools and by editorial competition. From the inventory of the words of a language to the presentation of the knowledge gained in a specific field, dictionaries mark the transition from knowledge accessible to specialists to knowledge for the masses in the context of an urgent need for information specific to modern world.

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University Research Centre), and being currently realized by the Department for Dictionaries & Encyclopedias of „Alexandru Ioan Cuza” University from Iasi.

The purpose of this project is to raise awareness on the role of adult education - as part of the general education system - in supporting learning throughout the entire life, individually and collectively. The EDAE project is part of the national and international approaches, having a theoretical basis, offering a conceptual and methodological framework which is specific to the field of lifelong adult learning.

### **General Context**

The education of adults is a field which is flourishing. The fact that one person is aware of the need to learn the entire life represents the starting point for personal development and it answers the challenge of a society which is permanently evolving from a cultural, economic and politic point of view. The interest for this educational field was raised on one hand, by perpetual social changes, on the other hand, by the need to adapt human beings to the raising demands of the socio-economic environment.

The meeting of the European Council held in Lisbon, between the 23rd-the 24th of March 2000, concluded that lifelong learning has a decisive role in educational and instruction activities promoted in Europe, involving various educational and instruction opportunities – formal, informal and nonformal – by actively involving institutions and organizations specialized in this field.

In 2006, The European Comission united all educational and training initiatives under the heading of *Lifelong Learning Programme*. Having a generous budget of 7 milliard euros for 2007-2013, the new programme replaces European educational, vocational and e-learning that existed before 2006.

The concept of *education for adults* refers to a vast topic and it covers a large area of methods and practice referring to the educational activities which took place especially for the adult population. The interest in lifelong learning is derived from the contemporary needs of our society which favours access to education and offers equal chances of development and affirmation. *Lifelong Learning* moves the focus from quantitative learning to qualitative learning, based on the acquisition of new techniques, validating competences that can lead to a higher socio-economic status and to the required flexibility in order to adjust to the needs of professional life, which is continuously changing.

Seen from the point of view of increasing social cohesion –no matter the gender, religion or ethnic origin – and from the perspective of diffusion, learning and raising awareness on roles, permanent education stimulates the citizen’s active involvement in all social life problems, leading to a higher degree of tolerance and

understanding, to respecting the rights of the individual and of the minorities. The growing interest manifested for this field in Europe in the last decades explains the appearance of valuable works in foreign specialized literature.

In Romania, the activities oriented towards adult education appeared in the second half of the XIX-th century, but pieces of advice for lifelong learning were given even in the XVII-th century, in this respect an example is *Învățăturile lui Neagoe Basarab către fiul său Theodosie – The Pieces of Advice of Neagoe Basarab Given to His Son Theodosie*. In 1861, at Sibiu, it was founded „The Transilvanian Association for Romanian Literature and Culture of The Romanian Nation”, ruled by the Metropolitan Anton Șaguna. The purpose of this association called ASTRA in Romanian was „to use all opportunities for educating people at a national level”, therefore it creates its necessary means: schools are created for the adults living in the countryside, books and newspapers are printed, the first countryside libraries and cultural houses appear, conferences and exhibitions are organized etc.

In the old kingdom, Spiru Haret started a systematic activity of teaching the masses, he is the one who initiated and organized outside school activities for primary school teachers in the countryside, his purpose was to improve the cultural and financial status of people in the countryside, by having literacy classes, by diffusing general knowledge, techniques related to agriculture, to the organization of the countryside area, of the banks and the cooperatives.

Another remarkable initiative was carried out by Nicolae Iorga, he created The Folk University from Vălenii de Munte whose organization practically combines vocational and cultural activity. In the inter-war period, Romania has known an unseen period of development, including also activities of cultural organizations specialized in adult education. Now, older plans are being revised and improved, there are also new initiatives, especially in the big cultural spots of The Big Romania: Bucharest, Cluj, Cernăuți.

In 1993, it was created the Association of Folk Universities from Romania (AFUR), having the status of a legal person with an ambitious plan of instructing permanent teachers and collaborators from these institutions. This is a turning point in the field of adult education in our country. In a relatively short period, AFUR organized more than 150 professional seminars on various topics for people employed in cultural houses and folk universities all over the country, creating 15 centres for adult education, thus enlarging the teaching performed at a central level, providing the necessary things for the member institutions and printing the magazine „Paideia” which was the first magazine in Romania for teaching adults.

### **The Present Stage of the Research**

If, at an European level, the field of adult education has made remarkable progress, both at a praxiological level and at an epistemological one, in Romania we face poverty as far as specialized writings in this field are concerned, despite educational policies more and more oriented towards lifelong learning. The project EDAE tries to fill in the gaps of this kind, by synthetically, lexicographically and historically approaching adult education in our country; the purpose is to offer a valid work tool to those interested, by providing conceptual clarifications from a diachronic point of view, mentioning specific aspects having a national character in the field of adult education. The dictionary is designed to provide the user with a coherent updated image of the scientific research done so far in this field, beyond the specific inventory containing specialized terms. Being the first lexicographical attempt in the field of adult education in Romania, EDAE will offer a complete image on specific terms inventory in the contemporary Romanian language and on the dynamics of their appearance and transformation.

The present paper is an encyclopedic dictionary which will include both the definition of the terms and the evolution of the realities presented through these specialized words. The inventory terms contains, up to this moment, over 500 terms, but it will be enriched during the process of reading specialized bibliography, which up to now, consists of more than 300 books, ranging from historiographical literature to specialized literature from the XXI-th century. Being a mixt dictionary, containing both references to language and encyclopedia, following the structure of the Petit Larousse, EDAE will have common and proper nouns –institutions, personalities, published materials, representative forums for adult education, the purpose is to present in a thematic volume the notions which are common for adult education, but also the specific Romanian terms related to education. Moreover, the dictionary will allow the capitalization of our remarkable Romanian tradition in the inter-war period in comparison to the results of other countries, the objective is the identification of development directions which are specific to Romania, in the context of the New European learning structures.

A characteristic of adult education is the multidisciplinary of fields of knowledge and activity; a direct consequence of the eclecticism specific to andragogy is the lack of universally valid answers to questions, this happens because of an incomplete and obscure theoretical basis. This is the reason why every attempt of giving a structure and of organizing materials will face enough obstacles. The authors of this volume will present the generally valid ideas for every concept, spotting different points of view in specialized literature where we

have such examples, without having the intention of making value judgements or creating hierarchies.

Fundamental notions referring to the discussed topic such as *adult education, continuous learning, formal education, nonformal and informal, the convergent point of education and training, lifelong learning and continuous education, vocational education* are concepts which are touched by semantic confusions because of translation or mechanical acceptance of the terms from other languages. The purpose of our dictionary is represented by the identification, definition, analysis and clarification of such aspects, offering a complete and distinct image, as far as it is possible, over the dynamics of the evolution of the Romanian space.

Starting from a definition which is widely accepted, after reading numerous sources related to adult education, presenting the nature of the epistemologic conflict which puts its fingerprint over it, continuously analyzing the methodological research which are specific to academic subjects, EDAE wants to be a monography of this field which is incompletely studied/discovered, but having large perspectives. The originality of this work consists in the corpus of significant pieces of information, from national and international sources, from the field of adult education, taking into account different methods and paradigms from this field seen in different cultural, political and socio-economic contexts.

*The Encyclopedic Dictionary of Adult Education (EDAE)* is an instrument of work which is indispensable to every scientist or researcher in this field. Moreover, the volume will bring together information which is absolutely necessary to better knowledge about Romanian traditions and experiences in the field of adult education, underlining the activity of the people in 1848, continued in the inter-war period by Spiru Haret, Dimitrie Gusti, Nicolae Iorga, Eugen Neculau, Stanciu Stoian.

### **The Documentary Basis and Bibliography**

In order to succeed in our endeavours, we have a documentary basis containing articles, specialized volumes, dictionaries, monographies, textbooks, laws, collections of specialised magazines, glossaries, volumes of the national and international conferences in the field of adult education, current laws, country reports made by UNESCO.

These documents will appear in a data base which will have almost 40000 thematic data sheets. Every member of the team involved in the writing of the dictionary will have his/her own archive of data sheet made after reading the bibliographic list, respecting the principle of the topic while creating them, the same principle will be followed while making the dictionary. The confrontation of



data sheets will lead to the final version of the big themes of research and of the terms/phrases/concepts/notions which are inside the explanation of each theme.

### **The Structure of the Articles**

Each entry in the dictionary will correspond to a concept/ proper noun which is relevant for the field of research. Having as a name a noun or noun phrase, the articles offer information regarding the following: the grammatical category of the linguistic form which serves as a label; the general definition of the term; linguistic usage; links to other articles from the paper, where it is the case.

When we have names of people, the following are written: quality, function, date of birth and of death, the history of that person and the most important contributions to the development of the field of adult education.

The encyclopedic information from EDAE is a diachronical view over the semantic evolution of concepts and realities specific to the Romanian space in the field of adult education. When there are controversial concepts, we mention different opinions which underline interference lines, common points.

### **The Present State of the Project**

EDAE addresses both specialists and non-specialists in the field of adult education, providing an useful tool for receiving information and clarification of concepts. The present paper is unique, being the first in specialised literature of this kind in Romania, the objective is the representation of national specificity, realities in the field of lifelong learning seen from a diachronic point of view.

The project EDAE started in May 2009 and it lasts three years. The people who form the team working on the dictionary has five members, young PhD students, PhD graduates or researchers in the field of education sciences, philology and philosophy, being coordinated by Prof. Dr. Laurențiu Șoitu. In the first year of this project, the bibliography, an inventory of terms which was not the final version were established, existing the possibility of adding new titles of books and items while doing the research; moreover, 10000 topic sheets of paper were created. For the documents' period, we predict that it will be over in the second part of the year 2010, then we will write articles for the dictionaries. The editing rules will be established according to the suggestions/pieces of advice of the specialists in the lexicographical field.

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## REFERENCES

- \*\*\* 1996, *International Encyclopedia of Adult Education and Training*, seconde edition, edited by Albert C. Tuijnman, Pergamon, Oxford.
- \*\*\*, 1998, *Dezvoltarea educatiei permanente in Romania*, Consiliul National de Finantare a Invatamantului Superior, Editura Alternative, București.
- \*\*\*, 2006, *Intercultural Migrant Woman Initiatives: key issues, methods ang guidelines*, Odyssee, Sittard.
- Aitchison, John, 2003, „Adult literacy and basic education si Enhancing international cooperation and solidarity”, în *Adult Education* no. 60/2003.
- Birzea ,Cezar (coord.), 2001, *Invatarea permanenta – prioritate a politicii educationale din Romania*, Institutul de Stiinte ale Educatiei, Bucuresti
- Buckhert, Lene, 2003, „Financing Adult Education: Constrints and Opportunities”, in *Adult Education* no. 60 din 2003.
- Gartenschlaeger, Uwe, Heribert Hinzen, 2001, *Prospects and Trends in Adult Education*, IIZ/DVV, Bonn.
- Hinzen, Heribert, Ewa Przybylska (eds), 2004, *Training of Adult Educators in Institutions of Higher Education. A Focus on Central, Eastern and South-Eastern Europe*, IIZ/DVV, Bonn-Warsaw.
- Jelenc, Zoran, (ed), 1996, *Adult education. Research in the countries in transition*, Andragoski Center Slovenjie, Ljubliana.
- Knoll, Joachim H., 2002, *Erwachsenenbildung – Quo vadis? – Beitrage zur internationalen Diskussion*, Impuls Publishers, Krakovia.
- Longworth, Norman, 2003, *Lifelong Learning in action. Transforming Education in the 21st Century*, Routledge Falmer, London and New York.
- Longworth, Norman, 2006, *Learning Cities. Learning Regions. Learning Communities. Lifelong learning and local government*, Routledge Falmer, London and New York.
- Masson J.. R, 2003, *Thirteen Years of Cooperation and Reforms In Vocational Education and Training In The Acceding and Candidate Countries Prepared by ETF*.
- Medel, Carolyn, Anonuevo (ed), 2003, *Lifelong learning. Discourses in Europe*, UNESCO Institute for Education, Hamburg.
- Mercken, Christina, 2004, *Education in Ageing Society. European Trends in Senior Citizens' education*, Odyssee, Olanda.
- Palos, Ramona, Simona Sava, Dorel Ungureanu, 2007, *Educatia adultilor. Baze teoretice si repere practice*, Editura Polirom, Iasi.
- Panicker, P. N., 2003, „A private organisation promoting adult education”, in *Adult Education* no. 60/2003.
- Păun Emil, 1992, *Adult education in Romania and the social movements*, Council of Europe, Strasbourg.
- Sava Simona, M. Matache, 2003, *Portret al educatiei adultilor in Romania*, Editura SILMEC PROD S.R.L. București.
- Sava, Simona, 2007, *Formatorul pentru adulti – statut, roluri, competente, provocări*, Editura Universității de Vest, Timișoara.

Strietska-Ilina O., Caruana A., Mustafai A., Ploegmakers A., Schmidt H., Deij A., 2004, *Peer Review Report Romania. From Consultations to Initiatives Activating the Role of Social Partners in Continuing Training in Romania. Prepared for the European Training Foundation (ETF).*

## ANEXA 1.

### Inventar intrări DEEA

<b>STRUCTURI PSIHICE</b>	Autoritate locală în educație	Comitete prefecturale pentru educația adulților
Abilități cognitive	Centre de învățare deschisă	Comunitate educativă
Acomodare	Centre locale	Comunități organizaționale
Adaptare	Centre pentru educația populară a adulților	Control guvernamental
Afectivitate	Centre pentru educație agricolă	Factori locali în educația continuă
Aptitudine	Centre pentru studii liberale	Institut pentru învățarea la distanță
Atitudine	Centru cultural	Institutul național pentru educație comunitară
Creativitate	Centru de documentare	Instituții de educație a adulților
Deprindere	Centru de educație a adulților	Management educațional
Deprindere motorie	Centru de învățare auto-direcționată	Management organizațional
Diferențe biologice	Centru de resurse	Model local teritorial
Motivație	Centru de training vocațional	Organizație care învață
Personalitate	Centru multi-media	Organizații non-profit
Priceperi	Centru rezidențial	Organizații religioase
Psihologia dezvoltării	Cine club	Parteneriat educațional
Readaptare	Clase pentru cetățeni de vârstă a treia	Parteneriat social
Stima de sine	Club dans	Societate educațională
Strategie cognitivă	Club școală	
<b>STRUCTURI INSTITUȚIO- NALE</b>	Comitet consultativ	

Societate informațională	Grup țintă	Învățare bazată pe muncă
Structura de calificare	Entități de legătură	Învățarea
Structură de program	Întâlnire	demonstrativă
Structură de suport	Învățământ cu plată	Învățarea
Școala adulților	Învățământ frontal	experiențială
Școala de vară	Învățământ pe grupe	Învățarea prin
Școala superioară populară	Învățământul deschis pieței muncii	exemplu
Școala vocațională	Oportunități educaționale	Îndrumare metodologică
Școală de producție	Organizarea învățării	Joc de rol
Școli populare superioare	Organizarea procesului de învățământ	Joc didactic
<b>MODALITATI DE ORGANIZARE A ACTIVITATII</b>	Seral	Joc educațional
Activități opționale	Structuri de educație a adulților	Forum de discuții
Activități recreative	<b>STRATEGII</b>	Instruirea asistată de calculator
Acțiune colectivă	<b>DIDACTICE</b>	Instruirea programată
Acțiune reciprocă	<b>METODE</b>	Metode în educația adulților
Acțiuni dedicate vârstei a treia	Curs elementar	Metoda buzz
Curs de grad	Experiment	Metoda expositivă
Curs de perfecționare	Organizarea modulară	Metode de învățare în grup
Curs elementar	Pluridisciplinaritate	Studiu individual
Curs preparator	Expunere	Test de cunoștințe
Curs universitar	Examinare	Observația
Cursuri de bază	Exerciții practice	Psihogimnastică
Cursuri de seară	Exercițiu	Rezolvarea de probleme
Cursuri de vară	Învățare asistată de calculator	Plan de comunicare
Cursuri de week-end	Învățare prin descoperire	Plan de studiu
Cursuri fără credite	Învățare socială	Predare combinată
Cursuri prin corespondență	Învățare auto- direcționată	Pregătire la locul de muncă
Cooperare	Învățare bazată pe activitate	Studiu comparativ
Grup de discuții		Studiu complementar
Grup de lucru		Studiu de caz
Grup marginalizat		

<b>MIJLOACE/ RESURSE</b>	Platforme educationale	Educație de bază
Echipament audio	Politica privind	Educație de-a lungul carierii profesionale
Echipament educațional	învățarea de-a lungul întregii vieți	Educație deschisă
Ghid de discuții	Politici culturale	Educație estetică
Înregistrare magnetică	Politici educaționale	Educație extrașcolară
Film educațional		Educație familială
Laborator de învățare	<b>EDUCAȚIE</b>	Educație fizică
Material de lucru	Educația de-a lungul	Educație formală
Infrastructură	carierii profesionale	Educație informală
educațională	Educația ecologică	Educație intelectuală
Instrumente de	Educația la locul de	Educație liberală
cercetare	muncă	Educație morală
Mijloace audiovizuale	Educația părinților	Educație
Mijloace didactice	Educația pentru	muncitorească
Noi tehnologii în	amatori	Educație muzicală
educație	Educația pentru	Educație non-formală
Programe pentru	cetățenie	Educație part-time
garantare socială	Educația pentru	Educație pentru
Oferta educațională	sănătate	democrație
Sursele cunoașterii	Educația pentru	Educație pentru
Rețea educațională	sindicate	educație comunitară
Rețea pentru o nouă	Educația pentru vârsta	Educație pentru mass- media
învățare a adulților	a treia	Educație pentru pace
Rețele pentru	Educație sexuală	Educație pentru
schimburile reciproce	Educație superioară	progres social
de cunoștințe	Educație suplimentară	Educație pentru
Resurse umane	Educație tehnologică	timpul liber
Tehnologie didactică	Educație vocațională	Educație pentru viața
Tehnologii	Educație a adulților	privată
educaționale	Educație agricolă	Educație permanentă
Servicii educaționale	Educație artistică	Educație populară
Sistem de învățământ	Educație cetățenească	Educație post- secundară
pentru adulți	Educație civică	Educație postșcolară
Sistem educațional	Educație	Educație prin
Sistem multimedia	complementară	corespondență
Soft pedagogic	Educație comunitară	Educație prin egali
Sprijin financiar	Educație continuă	

Educație privind mediul și moștenirea culturală	<b>ÎNVĂȚARE</b>	Învățarea prin exemplu
Educație profesională	Învățare asistată de calculator	Învățarea senzitivă
Educație publică	Învățare prin descoperire	<b>FORMARE</b>
Educație recurentă	Învățare socială	Formare alternativă
Educație reflexivă	Învățare auto-direcționată	Formare continuă
Educație relativă la mediu	Învățare bazată pe activitate	Formare permanentă
Educație remedială	Învățare bazată pe muncă	Formare profesională
Educație rurală	Învățare de-a lungul întregii vieți	<b>PARTICIPANȚI</b>
Educație socio-culturală	Învățare deschisă	Adult
Educație tehnică	Învățarea adulților	Agent al schimbării
Educație vocațională	Învățarea auto-dirijată	Cadru didactic
Eficiența învățării	Învățarea cognitivă	Coordonator
Egalizarea șanselor	Învățarea demonstrativă	Animator
<b>EVALUARE</b>	Învățarea experiențială	Director de studii
Evaluare continuă	Învățarea incompletă	Educator
Evaluare criterială	Învățarea integrată	Consumator de cultură
Evaluare formativă	Învățarea în echipă	Formator
Evaluare inițială	Învățarea limbilor străine	Lider de discuții
Evaluare normativă	Învățarea ocazională	Receptor
Evaluare simultană		Referenți
Evaluare sumativă		Relații umane
		Responsabil de formare
		Formarea formatorilor



## **BLENDED LEARNING AND SELF ORGANIZED LEARNING, KEY ISSUES IN ADULT EDUCATION**

IRINA MACIUC<sup>1</sup>, MIHAELA AURELIA STEFAN<sup>2</sup>

### *Abstract*

The blended learning can combine face-to-face interaction, an online course, and computer-mediated instruction. It also applies IT activities. We think that *the blended learning* have realistic opportunities to make learning independent (self organized learning). The paper offers some considerations of educational perceptions in that field of study. It is a challenge to us like pedagogues to provide the correct amount of guidance without providing too much direction in lifelong education. In today's adult education institutions, such as universities, *the blended learning, the self organized learning*, and its impact on education is just beginning to be understood. We think that also some disadvantages of e-learning have been identified such as lack of peer contact and interaction, high initial costs for preparing multimedia content of learning materials.

*Keywords:* blended learning, interactive learning, independent learning, e-learning

### **Introduction**

Training for lifelong learning, for continuous improvement is now a widely accepted necessity. Education can't be reduced in schools anymore and can't be restricted to a single time period.

Currently, information is obtained, distributed and used through the possibilities offered by the *web* technology [Grant, 2006]. H. Siebert notes that in the last decade of the last century, “a global political reevaluation of lifelong learning” shines on, a reality that must be understood both as “human resource and coping strategy” [Siebert, 2001, p. 79].

The emphasis of the adult's responsibility in learning, the development of his self-sufficiency are objectives that must be considered when building the teaching act, especially since one of the fundamental trends of global education development can include:

- *individualization of training;*
- *ensuring flexibility in organizing learning, allowing the reconnection of adults of all ages to influence educational systems;*

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- *computerization of education at all levels* [Maciuc, 1998, p. 88].

The integration of new information and documentation technologies in learning can enhance the quality of education, especially since “the teaching demarche of the initial training is one focused on educating, so the trainer’s role is to set the context, the framework in which teaching is self-formed. Thus, in view of sustained training, education enfolds on the patterns of an action located in the confines of education and self-education” [Ștefan, 2008, p.47].

*Blended Learning* combines on-line training methods, traditional formal training, tutoring, a learning/teaching system that integrates multiple aspects and approaches specific to the study, being, according to experts, *a product, a purpose and a process*. In this way, we can address adult learning opportunities as a combination of classical methods and/or interactive, with materials based on IT technology, e and m-learning, autonomous learning techniques, etc. To ensure the accuracy of the terms used, we point out that *E-Learning* or *electronic learning* is that type of learning/teaching whose support is represented by computer technologies, and *m-Learning* is using mobile devices such as *MDA*, *PDA* or even mobile phones. Combining face-to-face training and computer-mediated learning has as result the *blended learning* [Graham, 2005]. It is a challenge with an infinite number of possible solutions [Bonk & Graham, 2005]. At the same time, social aspects are also important [Ileana Hamburg *et alli*, 2003].

### **Projects and Partnerships**

“*ViReC e-Initiative*” Project, a virtual learning resources center, with a reproducible structure, is a European attempt to build a virtual learning environment through *ICT* and *ODL* in higher education institutions. The main objective of the project is to create a high quality learning environment as a network of European universities. This will ensure access to new better forms, methods and learning resources, by harnessing the best practices in the field. It is a project aimed at developing innovating practices and services. It was designed to enable integrated learning based on intra and interdisciplinary units. It presents wide possibilities to stimulate group learning and optimize collaboration between teacher/trainer/tutor and trainees. It also allows rigorous planning and careful monitoring of the study.

*ECASME* is a project developed under the *Leonardo da Vinci European Initiative*, a collaborative project involving partners such as the University of Limerick, AMT, University of Craiova, University of Suceava, University of Aveiro, ICDC / ITT in Sweden and the Foundation for Development (*CEDeF*) in Latvia. The project involves the research of training needs that exist within SMEs

in Europe. The main objective is to identify the best practices in learning and in specific content needs analysis in a friendly user under an online format.

The general objective of the *COMBLE Project (Community of Integrated Blended Learning in Europe)* is to improve the quality of *Blended Learning*, in order to ensure quality education in business environment, through *training*, consultancy, learning facilities in three areas: higher education, permanent professional / continuous education and business education. The project is coordinated by Prof. Dr. Margit Scholl (Recipient Organisation: *Technische Fachhochschule Wildau*), having German, Danish, Dutch, Polish and Estonian partners (<http://www.comble-project.eu> <http://www.comble-project.eu>). In any of these cases, *network administrators, educational administrators and developers of learning materials* have a role that can't be challenged (also see *ABCD-Advanced Blended Learning and Didactics*, Grundtvig Project, 2005).

It is estimated that there are 8 dimensions involved: institutional, technological, interface, pedagogical (setting goals, learning needs analysis, content analysis of learning, establishing the strategy and mainly the methods, etc.), evaluative, support (resource) and ethical dimension. [Singh, 2003, [http://asianvu.com/digital-library/clearing/blended-learning-by\\_Singh.pdf](http://asianvu.com/digital-library/clearing/blended-learning-by_Singh.pdf)].

An effective *blended learning* solution includes a mixture of three types of learning with the following ingredients:

1. An instructor who directs the learning;
2. *E-mail* and telephone support;
3. Virtual classrooms through *videoconferencing*, where the instructor explains subjects specific in group learning and proposes issues/questions.
4. Interaction between adult learners and the instructor/tutor/mentor, and between adults themselves is done through chat to foster group learning;
5. Help and query topics related to learning management/administration (subscription, *LMS platform* issues, etc.);
6. Examination and certification [Alonso, López, Manrique and Vine, 2005, [<http://aulatika.net/app/download/1629822702/An+instructional+model+for+web-based+e-learning+education.pdf>].

### **The Results of an Empirical Research**

The investigation we conducted seeks rather an effort to reflect and tries to open perspectives for future challenges. It is mainly based on subjective data, i.e. perceptions and representations of students and teachers. Learning proficiency may play, as is known, a central role in the social integration and professional success. In our case, we set explicit goals and realistic objectives. The objectives were:

- defining the main characteristics of the new forms of learning, according to the vision of the adults investigated and students-future teachers;
- highlighting potential problems in the continuous training plan for teachers and adults generally. The explanatory framework of our attempts was constituted of preparing to meet the changing knowledge society, by watering their creative and active learning.

Based on the above allegations, in the course “Psycho-pedagogy of learning” we applied a questionnaire aimed at student views on “blended learning” and “self-directed learning”. We started from the assumption that today’s students will be more prepared for an alternative approach of *blend*-type learning. In the course, *blended learning* and *self-directed learning* were defined, and types and specific learning contexts were presented [Maciuc, 2005, 2006]. Unlike today’s Romanian adults, students were informed and sensitized to specific issues.

Data for the hypothesis of the study were subjected to a comparative analysis between categories of subjects and interpreted by reference to several criteria.

We present below the results obtained by applying the questionnaire to identify students’ perceptions about their *blended learning* and their training needs analysis.

During one year (2008/2009), we discussed the impact of new forms of learning with inspectors, trainers, future teachers of different specialties. The sample included 111 subjects, students at the University of Craiova (History - 39, Theology - 22, Law - 26 and Biology - 24) and 26 trainers, inspectors, female kindergarten teachers. Sample selection criteria used were:

1. education level;
2. social recognition of the expertise in the field of work;
3. academic performance for students-future teachers.

Data was collected through semi-directive or informal interview, focus group, theoretical documenting and empirical research, group discussions and interpretation of data obtained by applying the questionnaire, but also through some recent curricular documents (provisions on testing/certifying digital skills). As for us, we found that the information gained by adults involved in training programs and students-future teachers who have received a course of psycho-pedagogy of learning is significantly higher in the areas indicated. Obviously, more research data are needed to elucidate the importance of paradigm changes in learning science. To develop the questionnaires, a simple questionnaire containing 8 questions, we initially conducted a focus group, identifying specific problems and situations. Using a 5-point scale, subjects were asked to respond: 1. To what extent are the Romanian adults involved in the organization of their learning?; 2. To what extent learning environment in our country is compatible with: a) *blended learning*? b) *self-organized learning*?; 3. Do you appreciate we have the resources

necessary for this purpose?; 4. To what extent core competencies of adult can be developed through these learning activities?; 5. To what extent is it possible to assess progress in this type of learning (*blended learning*), in view of its optimization?; 6. To what extent, in Romanian adults' education, success in self-directed learning is registered / certified?; 7. To what extent the education methods that we currently use are adjusted to the mentioned forms of learning (*blended learning, self-directed learning*)?; 8. Do you think that there is a positive trend in the relevant areas (*self-directed learning, blended learning*)? (scale: To a great extent=5; Moderately=4; Somewhat=3; A little=2; Very little=1; Not at all=0).

Group discussions with trainers and inspectors regarded:

*Relevance:* To what extent the implementation of blended learning can meet our needs? What do we want to obtain through it?

*Will:* To what extent are we ready to demonstrate initiative in organizing our own learning? What are the conditions necessary to ensure its success? Things may be different in another time?

*Resources:* What are our time, staff and financial resources for the launch, implementation, control and evaluation of such initiatives in achieving learning?

Adult participants in the discussion appreciated:

- the stimulation of the interaction and learning motivation;
- the acquisition of the training autonomy;
- the profitable relationships at the workplace;
- the enhance of the effective participation and learning/collaboration intensity;
- the time and space flexibility given to the exchange of ideas;
- the open and distance learning;
- the interactive, open and flexible learning;
- the real opportunities for continuous improvement of study and personal development.

## **Results**

Researches in the specialized literature showed that, as a person makes progress in his education attainment, he becomes more capable of self-organization in learning, becoming more able to influence his own learning outcomes.

The concept of "self-organization" is based on the premise that these systems are too complex, too rich in variations to be represented by simple explanatory models. Because of their extraordinary complexity, the systems are hardly appraisable to be successfully routed to one particular purpose only by controlling the central factors [Arnold, 1993, *apud* H. Siebert, 2001].

To *Question 1* – “To what extent are the Romanian adults involved in the organization of their learning?”, most subjects (51.3%) have chosen the answer “somewhat”, which highlights the awareness of weaknesses in the organization of the learning process. Although the responsibility for learning is a new target to be considered by the learner, although emphasis should be on the assertion of independence in managing internal and external learning resources, in organizing their learning, subjects in the experimental group believe that they “somewhat” participate in organizing their learning.

Answers to *Question 1* may be correlated with those to *Question 2* – “To what extent learning environment in our country is compatible with blended learning?”.

If 51.3% of the respondents considers that Romanian adults participate only “somewhat” in the organization of their learning, 43.2% believe that the learning environment in our country is compatible with *self-organized learning*, as well “somewhat”. It means that subjects in the group blame the less conducive learning environment. In contemporary approaches to learning and especially in academic learning approach, the self-organization in learning ability was put, although not always explicitly, in relation to personal autonomy.

Thus, it is a must to provide learning experiences that lead to a certain psychic instrumentation, the assertion of *self-determination*, *self-organization*, *self-direction* competences.

Compatibility between the learning environment of our country and blended learning is assessed by the same majority share of 46.8%, but this time only “a little”. It would result that students identify few opportunities to call this type of learning whose support is the computer technology, although the current observations and conversations show that Internet access is a common concern to young people. We can draw the following conclusions: Either the Internet is not used for a self-organized learning, or students do not have clear in mind the concepts of *blended learning* and *self-organized learning*.

Because the answers to the following questions reveal, in the students’ case, highly scattering, demonstrating uncertainty and confusion in the mastery of concepts, we will discuss further the answers of inspectors and trainers having a genuine experience in both areas.

The answer to *Question 3* reveals that most students believe that we have the resources needed to use the two forms of learning subject of our analysis only “somewhat” (22.5%) or “a little” (27.9%) and 19.8% “very little”. Adults interviewed are more optimistic, approximately 40% considering that “somewhat” there are resources (38.9%).

In the literature specialized [Friedrich and Mandl, *apud* Siebert, 2001], two major categories of competencies are described as “components” of the *self-directed learning*, each with a structural and a procedural side:

- a. cognitive skills;
- b. motivational skills.

Results to *Question 4* show that the learning activities under analysis are appreciated positively by adults in adult basic skills development: 53.8% - moderately, 42.3% - to a great extent, as opposed to students who assessed at a rate of 34.2% - moderately, respectively 28.8% - to a great extent. Among the advantages mentioned by the subjects during our investigation are included:

- allows teachers and students to actively exchange ideas, information;
- enables collaboration in carrying out projects of any kind, using multiple modalities of communication;
- stimulates active participation and individual production of knowledge;
- enhances performance in learning.

Comparing the results of the *Question 4* to those of *Question 7* – “To what extent the education methods that we currently use are adjusted to the mentioned forms of learning (*blended learning, self-directed learning*)?”, we can capture the following idea: although students realize the effectiveness of the two forms of learning in adult basic skills development, they do not grant the same vote of confidence to the methods used currently. These methods, according to subjects, are compatible with *blended learning* and *self-directed learning* “somewhat” or “a little”. However, a significant number of subjects, both students-future teachers and adults, believe that there is a positive trend in the relevant areas (*self-organized learning, blended learning*). Thereby, a slight discrepancy between the responses of subjects to questions 7 and 8 can be noticed, discrepancy that can be justified by the use somewhat ambiguous of the concepts of *blended learning* and *self-organized learning*. In other words, the subjects of our investigation rather guess the area of the two concepts, without having in mind a clear definition of the terms.

To *Question 6* – “To what extent, in Romanian adults’ education, success in self-directed learning is registered/certified?”, 9.9% of subjects responded “to a great extent”, 13.5% - moderately, which shows that, on the one hand students show their confidence in the effectiveness of the two forms of learning in personal development, affirmation of basic skills; on the other hand, they believe that these forms of learning are not sufficiently used in the adults’ education.

The *record and evaluation* of the progress in learning are steps in self-organized learning more difficult than the self-monitoring because it involves value judgments on the quality of work. Current observations have shown that students are able to assess their progress with sufficient accuracy and the self-evaluation

ability can be optimized by the feedback provided by the teacher. However, students' opinions about the extent in which the assessment of progress in mixed learning can be measured, in view of its optimization (*Question 5*) are split as follows: most answers are centered around the following values: "somewhat" and "a little".

### Conclusions

Each type of training for adults can be classified in different ways of organization of the educational process (modular organization, distance learning, programmed instruction or computer assisted instruction, summer school, conference, counsel, symposium, forum, seminar or TV debates, etc.) [D. Schipor, 2003]. This combination or blend of various technologies with the "face to face" traditional approach of teaching and learning has given rise to a new paradigm in the educational environment. Innovative use of technology has led to the distortion of differences between the two areas, the classical teaching and the much more recent ODL [Osguthorpe and Graham, 2003, p. 227-233].

*Conclusions with respect to students and teachers:*

- ✓ although the term "blended learning" is not a new concept, increasing in popularity especially in the training and retraining area, its use with students is somewhat made with confusion. Subjects infer the extension of both concepts (*blended learning and self-organized learning*), but do not have clear in mind the concepts;
- ✓ most subjects appreciate that the learning environment in our country does not support the use of the two forms of learning (blended and self-organized) in universities;
- ✓ most people are aware of the benefits of combining traditional and electronic systems, but also with independent, self-directed learning;
- ✓ empirical research reveals that students are still confused or neutral towards Internet-based training.

For teachers, both *blended learning* and *self-organized learning* represent real challenge as the need to provide real guidance for adults in their study, without giving too much information or without inhibit the initiative in learning and the intellectual autonomy. Studies have demonstrated the effectiveness of interactive and multimedia training materials. These foster creativity and promote learning through exercises and discovery.

We believe that this paper was able to identify some *issues, but also critical condition*, all in order to open discussions based strictly on the future dynamics of higher education and adult education institutions. We proposed, in fact, a

contextual framework for further analysis and debate on the issue of *blended learning* and his new form of learning supports *self-directed learning*.

## REFERENCES

- Alonso, F., López, G., Manrique D. and José M Viñe, 2005, "An instructional model for web-based e-learning education with a blended learning process approach", in *British Journal of Educational Technology*, Vol 36, No 2 pp. 217–235.
- Bonk, C. & Graham, C., 2005, *Handbook of blended learning: Global perspectives, local designs*, Pfeiffer Publishing, San Francisco, CA.
- Chen, W. & Looi, C. K., 2007, "Incorporating online discussion in face to face classroom learning: A new blended learning approach", in *Australasian Journal of Educational Technology*, 23(3), pp. 307-326, <http://www.ascilite.org.au/ajet/ajet23/chen.html>.
- Grant, L., 2006, *Using Wikis in Schools: A Case Stud.*
- Hamburg, I., Lindecke, C., Herbert ten Thij, 2003, "Social aspects of e-learning and blending learning methods" în *4 - th EUROPEAN CONFERENCE E-COMM-LINE 2003, September 25-26*, Bucharest.
- Heinze, A.; C. Procter, 2004, "Reflections on the Use of Blended Learning", in *Education in a Changing Environment*, Salford Education Development Unit, University of Salford., [http://www.ece.salford.ac.uk/proceedings/papers/ah\\_04.rtf](http://www.ece.salford.ac.uk/proceedings/papers/ah_04.rtf).  
<http://jite.informingscience.org/documents/Vol5/v5p235-249Heinzel156.pdf>.  
[http://asianvu.com/digital-library/elearning/blended-learning-by\\_Singh.pdf](http://asianvu.com/digital-library/elearning/blended-learning-by_Singh.pdf).  
[http://futurelab.org.uk/resources/documents/discussion\\_papares/Wikis\\_in\\_Schools.pdf](http://futurelab.org.uk/resources/documents/discussion_papares/Wikis_in_Schools.pdf).
- Omniscop, Craiova
- Maciuc, I. Frăsineanu, E.S., 2005, "Pedagogie diferențiată și învățare autoorganizată, două concepte cheie pentru schimbarea educațională:", in vol.: *Schimbari de paradigmă în științele educației (coord.Fl.Voiculescu)*, Editura Risoprint, pp. 29-39, Cluj-Napoca.
- Maciuc, I. Pricină, A., 2006, "Educația adulților și învățarea autodirijată, noi construcții noționale", in *Analele Universității din Craiova, seria Psihologie-Pedagogie*, Anul V, nr.11-12, pp. 21-33.
- Marsh, J., 2001, *How to design effective blended learning*. Retrieved September 9, 2003, from <http://www.brandon-hall.com>.
- Osguthorpe, R.T., Graham, C.R., 2003, "Blended Learning environments, definitions and directions", in *The Quarterly Review of Distance Education*, 4 (3).
- Schipor, D., 2003, [www.rocsir.usv.ro/archiv/2003\\_1-2/6DoinaSchipor2003.pdf](http://www.rocsir.usv.ro/archiv/2003_1-2/6DoinaSchipor2003.pdf).
- Siebert, H., 2001, *Pedagogie constructivistă*, Institutul European, Iași.
- Smith, J. M., 2001, "Blended learning: An old friend gets a new name", in *Executive Update Online*. Retrieved January 8, 2004, from <http://www.gwsae.org/Executiveupdate/2001/March/blended.htm>.
- Ștefan, M., 2008, *Facilitarea și îndrumarea învățării pedagogiei. Rolul seminariilor specifice în formarea inițială a profesorilor*, Editura Universitaria, Craiova.



# **PREPARING THE WORKFORCE FOR THE INFORMATION SOCIETY**



## **WORK IN THE INFORMATION SOCIETY: PAST AS PROLOGUE TO THE FUTURE IN UNDERSTANDING OUR TRANSFORMATIONAL TIMES**

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### *Abstract*

Embracing a past-present-future framework, the session invites participants on a journey and into a dialogue about the meaning of the “information society” and “work” in that context to illuminate the difference between change and transformation. A brief jaunt through the history of previous societal transformations coupled with a projection into the future, both immediate and long range, sheds light on the challenges to our professions and illuminates the internal and external resources available in helping both adults and society grow into our future. Our fundamental concepts of work, education, and humankind itself, beckon us into dialogue.

*Keywords:* social transformation, information society, future of work, adaptation, UNESCO, dialogue

### **Revisiting our Human Societal Trajectory**

Throughout the history of life on this planet adaptation has been an essential ingredient in surviving as well as thriving in and with one’s environment, especially during transformational times. An adaptation is frequently a response to some force or pressure that has caused or is causing change, reducing one’s ability to successfully function in the environment unless one adapts. Today we are confronted with a need to adapt to what has been termed the Information Age or Society, an evolving concept that purportedly is being catalyzed by Information and Communication Technologies (ICTs). An important point to stress, however, is that adaptations are required not just of individuals but of the very structures of society itself, making such a change

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transformational in nature – that is, restructuring the social order, the social structures<sup>2</sup>, and the institutions<sup>3</sup> of society. Accordingly, we are in the midst of a social transformation. Of course, we have an opportunity to not just react, but also contribute to its unfolding in a manner beneficial to both the individual and society. A seemingly straightforward understanding, often offered, centers on the production of goods and services which, with industrialization, relied on the advent of the machine and resulted in greater material production with the accompanying design and division of the labor force. An information society, and the advent of ICTs, results in greater production and transmittal of information at higher speeds, lower costs, and distributed instantaneously around the globe. The information society, however, is a more multi-faceted concept and phenomenon, as will be discussed in this symposium and conference. Furthermore, many us in this field of study and practice have, for at least four decades or more, recognized and are continually addressing the challenges of galvanizing an information rich society into a learning society that sports access, availability of opportunities, and the development and nurturance of S/self-directing<sup>4</sup> learners. The labor force? The very term may need reconceptualization. Work? Some incipient changes are already evident; others are more far reaching. Our gathering together in Romania offers us an unprecedented opportunity to dialogue with each other about how we might best prepare both ourselves and the work force for the Information Society or its successor.

While the information society is often seen as technological in nature, technology<sup>54</sup> has always served as a catalyst throughout history for the major

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<sup>2</sup> Often, but not always, the terms social order and social structure are used interchangeably. The commonality the terms share implies that there is a stable infrastructure to a society provided especially by the major institutions and “the patterned and relatively stable arrangement of roles and statuses found within societies and social institutions” [Drislane & Parkinson, 2002].

<sup>3</sup> In the broad social science sense of the term, institutions address different social functions in a society and are most affected by social transformations. It is important to differentiate, however, between specific concrete institutions and the concept of institution such as education, religion, work, the family, etc., all of which are affected by a major societal transformation.

<sup>4</sup> In my writings I differentiate between self (lower case “s”) and Self (capital “S”) to reference, accordingly, the autonomous separate self sense and the homonomous larger sense of Self.

<sup>5</sup> Arthur (2009) makes the case that we should not think of technologies as “fixed in structure” (p. 41) for they are constantly changing and adapting, as – I might add – society and individuals are simultaneously called upon to adapt. Implications for us as educators of adults resonate with

transformations of humankind, an insight I gleaned when I first started seriously studying societal transformations for my doctoral dissertation [Boucoulalas, 1980]. The domestication of the plant and animal catalyzed our transformation to an Agricultural Society, invention of the machine catapulted us into the Industrial Society, just as communication and computer technologies are fueling the Information Society. All those changes led to more mega changes in social dynamics. For example, with the risk of oversimplifying, those who were landowners were accorded status during the purely Agricultural Era, during the advent of Industrial Society capital and material goods took precedence, while now it is “knowledge” that is becoming a key attribute.

Two points, though, are important to address: (a) Agriculture and landowners, of course, have not evaporated but have been transformed by the Industrial and Information Revolutions, (b) Not all corners of society transform simultaneously. Transformation is often an incremental process.

The initial emergence of our current transformation was recognized as early as the 1950s when, at least in the USA, data from the Department of Labor Statistics revealed a shift as the jobs in the service sector began to outnumber those in agriculture and industry. Equal recognition was given during that time period to understanding the awareness put forth by Alfred North Whitehead at the beginning of the twentieth century that, as the time span of knowledge was shortening, the life span of an individual was increasing, necessitating learning throughout life and lending fuel to the advancement of adult learning and education as a field of study and practice. We have certainly leapt forward in Whitehead’s realization since then.

As early as the 1950s cultural historians, social scientists, and others were also aware that society was in the midst of a coming transformation. A major contributor – and one who deeply influenced my thinking – was Lewis Mumford, especially his book on the *Transformations of Man* [1956]. In fact, his prescient prediction was that “this change promises to be so profound that one must emphasize it by bestowing upon it a new name, to indicate that the process of infusing values and meaning into every phase of life will not stop with the formal school” (pp. 241-242). My encapsulated version of his book that I first constructed in 1980 (see Table 1, appended), has guided my understanding over the decades and influenced my perspective. In tracing the great transformations of humankind, it becomes clear that all transformations have likewise

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the title of Robert Kegan’s book: *In Over Our Heads: The mental demands of modern life* (1994).

included major shifts in worldview and image of humankind, as well as attitudes, values, and belief systems. Equally clear is the rapidity with which change, especially that of a transformational nature, is occurring. All major institutions of society (see endnote 2) are affected, especially two with which our field is integrally involved: Work and Education.

### **The Concept of Work**

What do we mean by the term “work” and “workforce”? As Applebaum [1992] has clearly demonstrated, work has been conceptualized differently in various ages from ancient times to the present. In post Homeric ancient times leisure was heralded by the aristocracy and those who had to work were either pitied, scorned, or spurned, with exception of the independent farmer who was respected. Applebaum also makes a major distinction between pre industrialized non market cultures where work is not as separate a sphere of life as it is in industrialized societies where for many work is considered work, not necessarily an avenue of fulfillment, bringing us up to the present day where meaningful work is sought by many. Looking at the future of work, he is of the position that work can be restored to its “human dimensions and meanings” (p. 590).

What frames our understanding of work today and by whom? With telecommuters, new business ventures and professions, and the rise of free agents, understanding the guiding image of “work” that informs our actions individually and collectively would be helpful. The way people are working and the relationship between individuals and organizations is changing. The rise of free agents, in fact, is burgeoning and, according to Pink (2001), it constitutes the “most significant transformation since Americans left the farm for the factory a century ago. Legions of Americans, and increasingly citizens in other countries as well, are abandoning one of the Industrial Revolution’s most enduring legacies – the “job” – and are forging new ways to work” (pp. 10-11). He further emphasizes that “understanding these new independent workers will be crucial to ...the nation’s social and economic future (p. 11). Beyond the USA countries such as Qatar have legalized the one person company [see At’Tarawneh, 2007]. What is happening in your countries, in the countries represented here at this conference, and what is our responsibility to help prepare this work force –or will they prepare us for the future? All these challenges are questions for us to pursue when we think about preparing the “workforce” for the Information Society.

### **The Concept of Education**

An educated individual in earlier times was one who was educated in the liberal arts. With the rise of professional schools in higher education an increased emphasis was placed on practical application, and – looking into the future – advances are already afoot addressing the educated person of the future as one who understands the state specificity of knowledge (that is, that some things are learned better in a different state of consciousness) but has honed the ability to enter and exit that state at will to glean the learning [see Roberts, 1989]. These perspectives, however, need not be mutually exclusive.

In preparing a workforce (however that is defined) for the Information Society knowledge of the liberal arts along with practical knowledge and skills development, as well as self-knowledge of one's ways of knowing and levels, states, and structures of consciousness have the potential to cultivate a flexible worker. Providing guidance for a confluence of these varying perspective is the UNESCO [DeLors, 1996] conceptualization of learning, which I embrace as a framework for our discussion [that is, skills development – learning to do something – learning to know, learning to be, learning to live together, and a more recent addition, learning to change]. I suggest that “work” holds the potential for developing all these aspects of learning not only for one's job but for navigating life itself, especially beyond content as in preparing the workforce to learn to change. UNESCO, however, offers us an even greater framework for pursuit of our theme of workforce development in the information society with its Global Intergovernmental Assemblies that gather heads of state along with civil society in preparing negotiated and agreed upon communiqués as well as action plans that emerge to guide professional practice.

### **The Current Global Context and the Contribution of UNESCO**

The United Nations and UNESCO have been key players in recognizing the transformational nature of our times, both in terms of the specifically targeted World Summit on the Information Society (WSIS), which took place in two parts: Geneva, 2003 and Tunisia, 2005, coordinated by the Communications Sector of UNESCO and the four recent Global Assemblies on Education hosted by UNESCO's Education Sector during 2008-2009, guided by a holistic vision of education.

### **World Summit on the Information Society (WSIS)**

The Plan of Action resulting from the WSIS is an ambitious one that reaches around the globe and into many strata of society, the objective being to “build an inclusive information society,” recognizing that “the Information Society is an evolving concept that has reached different levels across the world, reflecting the different stages of development” (see WSIS URL in references and visit the website for the Plan of Action). Among the matters advocated are public-private partnerships and multi-sector partnerships, the importance of infrastructure , capacity building, enabling environments, and the application of ICTs in all aspects of life, including “new ways of organizing work and business,” involving but not limited to promoting teleworking. An equal emphasis is directed to ethical dimensions and preventing abusive use of ICTs. Moreover, monitoring of results has continued on a yearly basis.

Sponsored by the UN, both governmental as well as nongovernmental organizations (Civil Society) continue to be vital parts of the discussions. Even a brief perusal of the resulting materials and projects from the Summit illuminates the wide swath of society to which efforts are directed. In addition to the use of ICTs in distance learning per se, one finds e-business, e-commerce, e-health, e-governance (catalyzing citizen involvement), and others. Special populations such as the marginalized, disabled, or indigenous populations are also highlighted as are success stories on the WSIS web portal, thus inspiring others. UNESCO has taken up the task of translating matters into practice under the mantle of the knowledge society and has distributed several publications toward that end. While annual post assembly meetings have transpired, a major follow up to the World Summit is scheduled for 10-14 May 2010 in Geneva. Both governmental and nongovernmental sectors are vitally involved. While such efforts are transpiring on a global scale, each of us could take the elements and adapt them to our own venues in order to prepare our workforce for the information society.

### **UNESCO and the Global Assemblies on Education**

As we gather in Romania today we understand that our field of study and practice is worldwide. Recognizing the importance of our field to society-at-large, UNESCO (United Nations Educational, Scientific, and Cultural Organization) has sponsored six World Assemblies on Adult Education and Learning approximately



every 12 years since 1949, the most recent held in Belem, Brazil during December 2009. This past year the Education Sector of UNESCO, mindful of the accelerating rate of change, and the importance of the world's challenges for which learning and education can make a difference, orchestrated four world education conferences in succession. Repeatedly recognized was the world of work as an important source of learning, emphasizing that "an innovative society prepares its people not only to embrace and adapt to change but also to manage and influence it" [UNESCO Education Sector, 2008, p. 8]. Recognized also was the current "context of rapid technological change" and the need to "adapt to the requirements of knowledge societies" (p. 7). The conferences, in order of their occurrence were the 48<sup>th</sup> International Conference on Education "Inclusive Education: The way of the future" (2008, November); World Conference on Education for Sustainable Development (2009, March-April); 2<sup>nd</sup> World Conference on Higher Education "New Dynamics of Higher Education and Research for Societal Change and Development" (2009, July), and the 6<sup>th</sup> International Conference on Adult Education, known as CONFINTEA VI (2009, December). I had the privilege of serving as a delegate to the Higher Education and Adult Education assemblies. Although outside the scope of this brief paper to elaborate, the resulting communiqués of both gatherings offer guidance to us. The Belem Framework for Action from CONFINTEA VI notes that "we face structural shifts in production and labour markets, growing insecurities and anxieties in everyday life, difficulties in achieving mutual understanding, and now a deepening world economic and financial crisis. At the same time, globalisation and the knowledge economy force us to update and adapt our skills and competences to new work environments, forms of social organisation and channels of communication," while the communiqué from the Higher Education gathering emphasized, among other matters, their social responsibility in this time of transformation. Moreover, throughout discussions the importance of connecting energies with the world of work was emphasized as were learner-centered approaches, transformative learning, critical consciousness, learning how to learn, self-management of learning, attention to marginalized groups, and related issues.

### **The Future of Work?**

It is well recognized by now that the pace of change is accelerating, at an ever-accelerating rate as well, catalyzing authors/inventors such as Kurzweil (2005) to

pronounce, in his book by that title, that the “singularity is near.” The singularity refers to the melding of biology and technology in the future human, a time in which technological advances are so rapid that the concept of humankind is transformed. Increasingly, he suggests, humans will be internally equipped with technology as nanotechnology begins to live in our bodies, enhancing our life and productivity. Far fetched? When one considers that Kurzweil, among other things, invented speech recognition technology which has helped many individuals with learning disabilities enter and succeed in formal education, including the earning of graduate degrees, it is conceivable that the next step would be for technology to move from external apparatus to internally implanted enhancers. Based on Kurzweil’s concept, Kunstler (2010) considers the implications for the work force of the future, explaining that “human singularity refers to the fusion of the human body with technology to achieve levels of mental acuity and physical ability that eclipse anything humans have previously known” thus representing “a singular event in human history: For the first time, people would be driven by laws other than those governing organic life” (p. 17). Such individuals, termed ESIs (Enhanced Singular Individuals) will be “defined by technological enhancements permanently installed in their bodies” (p. 18) because they could afford such enhancements, or because their parents, affording it as well, wanted the best for their offspring, or for other reasons. Kunstler engages the reader in considering what the meaning of leadership might be in the future. In a variety of ways he suggests that team building between ESIs and non ESIs will call upon deftly handled interpersonal and group dynamics to manage change. While such a scenario may seem implausible to some, one must also stay mindful of a more modest variation, often referred to as the “bionics,” explained by Fischman (2010, p. 35) “as mechanical systems that function like living organisms.” Amputees are fitted with limbs that perform with uncanny accuracy to an individual’s movement and work like the original limb. The author reports that “within twenty years artificial limbs could have skin that senses temperature and touch” (p. 51).

### **Challenges**

So, when it is possible to have one’s personal genome scanned, replete with gene modification and replacement, and where many forms of nanotechnology may be available to increase one’s efficiency and ability to access information, how will

individuals and countries respond? Will the ramifications of our responses catalyze a different kind of “digital divide” between “haves” and “have nots”?

First, it seems that we are called upon to adjust our view of the world in which we live and will live and to prepare to see things differently. Adapting to change is a key to navigating these times and also helping prepare the workforce in that regard. Equally important is an understanding that not all change is predictable. Moreover, as Talib (2007) illuminates, some of the events in history that have made the largest impact were neither expected nor predictable, a phenomenon he has called “The Black Swan,” and has titled his book accordingly. Using this knowledge as a mental framework should help us better understand our role as adult educators. We may have a pivotal role to play. Whatever happened to the term “learning society,” discussed as early as the 1950s by McGhee (1959)? Are those discussions still warranted? Will we continue to direct our energies to transforming an information rich society into a learning society? What will be our next steps?

As early as 1974, noted anthropologist Margaret Mead (1974) stressed that the most significant feature of the forthcoming transformation is that for the first time in history we know what is happening – that we are in a transformational period as substantial and momentous as the Copernican and Industrial Revolutions. She was convinced that as a species we have the power to shape the outcome and even recognize counter forces.

Then, in 1978, Willis Harman, then futures researcher and founder of the Center for the Study of Social Policy at Stanford University, cautioned that

If we fail to understand that ...society is indeed pregnant with the new social order and mistake the creative forces for threats to our well-being, we could respond defensively and end up with the birth process being far more disruptive than need be –and perhaps even with a miscarriage. ...Right action for the caterpillar is not refusing to become a butterfly—nor is it trying to transform prematurely. (p.22)

What are we doing or could we do as a field to embrace these challenges, and what other challenges abound?

## BIBLIOGRAPHY

- At'Tarawneh, M.A., 2007, "The 'single-person' company in the new amended company law of the state of Qatar", in *International Journal of Liability and Scientific Inquiry*, 1(1-2), pp. 175-187.
- Applebaum, H., 1992, *The concept of work: Ancient, medieval, and modern*, State University of New York (SUNY) Press, Albany, NY.
- Arthur, W. B., 2009, *The nature of technology: What it is and how it evolves*, NY: The Free Press, New York.
- Boucouvalas, M., 1980, *An analysis of lifelong learning and transpersonal psychology as two complementary movements reflecting and contributing to social transformation*. Doctoral dissertation. Tallahassee, FL: Florida State University.
- DeLors, J. (1996). *Learning: The treasure within*. Report to UNESCO of the International Commission on Education for the Twenty-First Century, UNESCO, Paris.
- Drislane, R., & Parkinson, G., 2002, *Online dictionary of the social sciences*. Retrieved March 22, 2010 from <http://bitbucket.icaap.org/dict.pl>
- Fischman, J., 2010, January, "A better life with bionics", in *National Geographic*, 217(1), pp. 34-53.
- Johnson, A.G., 2000, *The Blackwell dictionary of sociology: A user's guide to sociological language* (2<sup>nd</sup> ed.). MA: Blackwell, Malden.
- Kegan, R., 1994, *In over our heads: The mental demands of modern life*, MA: Harvard University Press, Cambridge.
- Kunstler, B., 2010, March-April, "The singularity's impact on business leaders: A scenario", in *The Futurist*, 44(2), pp. 16-22.
- Kurzweil, R., 2005, *The singularity is near: When human transcend biology*, NY: Penguin, New York.
- Malone, T.W., 2004, *The future of work: How the new order of business will shape your organization, your management style, and your life*, MA: Harvard Business School Press, Cambridge.
- McGhee, P., 1959, *The learning society*, Center for the Study of the Liberal Education of Adults, Chicago.
- Mead, M., 1974, "Ways to deal with the current social transformation", in *The Futurist*, 8(3), pp. 122-123.
- Mumford, L., 1956, *The transformations of man*, NY: Harper and Brothers Publishers, New York.
- Pink, D.H., 2001, *Free agent nation: The future of working*, NY: Warner Business Books, New York.

- Roberts, T.B., 1989, "Multistate education: Metacognitive implications of the mindbody psychotechnologies", in *Journal of Transpersonal Psychology*, 21(1), pp. 83-102.
- Taleb, N.N., 2007, *The black swan: The impact of the highly improbable*, NY: Random House, New York.
- UNESCO, 2009, *Fostering information and communication for development*, UNESCO, Paris.
- UNESCO, 2008, November, *Quality education, equity and sustainable development: A holistic vision through UNESCO's four World Education Conferences 2008-2009*, UNESCO Education Sector, Paris.
- World Summit on the Information Society (WSIS). Retrieved from [www.itu.int/wsis/index.html](http://www.itu.int/wsis/index.html) on various occasions from 2003 to present, the most recent 27 March 2010.

Table 1. *Major Transformation of Humankind from Primitive to Present*

	Approximate Onset of Period (# of years ago)	Transformation	Approximate Duration	Major Advances and New World View
Biological Evolution	1 Million	PRIMITIVE MAN (Animal → Human)	970,000 years	Homo Erectus – humans walk upright Homo Sapiens – leave a legacy of knowledge Development of Language (sound to meaning) Use of fire Invention of stone tools  ABILITY TO CHANGE AND CONTROL, RATHER THAN MERELY RESPOND AND ADAPT TO ENVIRONMENT
	30,000	ARCHAIC HUMAN (Stationary → Nomad)	18,000 years	Follow natural migration of wild herds, rather than stalk single animal  Development of more refined tools (e.g. harpoon, spear, etc.) ABILITY TO LEAVE THE ENVIRONMENT: EMANCIPATE ONESELF AND MIGRATE
	12,000	TRIBAL VILLAGER (Nomad → Village Agriculture)	5,000 years	Agricultural Revolution Domestication of plant and animal Beginning of settled communities From hunters and gatherers to farmers  ABILITY TO COOPERATE WITH NATURE AND CYCLES: BEGINNING OF SOCIAL ORGANIZATION AND GROUP LIFE.
Cultural Evolution	7,000	CIVILIZATION (Tribal → Civilized Culture)	4,000 years	Organization of the city and accompanying development of architecture, art, etc.  Change from manorial (Life) to mercantile (money) economy  Development of two classes: ruler and ruled  End of Stone Age with the discovery of how to extract metal from ore and resulting use of metal as tools, weapons, etc.  DEEMPHASIS ON BIOLOGICAL SURVIVAL AND SHIFT OF CONCERN TO SOCIAL AND CULTURAL DEVELOPMENT
	3,000	AXIAL HUMAN (Outer → Inner World)	2600 years	Spiritual nature of humankind stressed; concentration on "soul" alone emphasized; other aspects of being human ignored  Bodily activities repressed to reach goal of purification from animal nature  Church came into prominence  SHIFT TO WORLD DOMINATED BY RELIGION AND PRIMACY OF SPIRITUAL NATURE
	400	MECHANICAL HUMAN (Inner → Outer)	400 years	Copernican Revolution (1500's) Industrial Revolution (1700's)  Emphasis on outer world and mechanical/material/technological progress substituted for human development  Change from village industry to centralized industry  SHIFT TO WORLD DIRECTED PRIMARILY BY INTELLIGENCE AND THE SCIENTIFIC METHOD
Evolution of Consciousness	Present	NEW TRANSFORMATION IN PROCESS (Synthesis of Inner and Outer)		Emphasis on integrated development of sensory (outer) as well as non-sensory (inner) aspects of humankind  Integration and synthesis of Eastern and Western world views and definitions of reality  Shifting paradigm (scientific/religious view of world)  SHIFT FROM INDUSTRIAL TO LEARNING SOCIETY AND PLANETARY/WORLD CULTURE

Source: Boucouvalas (1980) based on Mumford (1956)

## **SPEECH MAPS: A NEW RESEARCH AND COMMUNICATION TOOL IN ADULT EDUCATION**

MARIA THEODOSOPOULOU<sup>1</sup> , VANA PAPALOIS<sup>2</sup>

### *Abstract*

People who speak the ‘same language’ can learn, communicate and collaborate in a better, faster and more effective way. This paper introduces speech maps as an innovative research and practice tool suitable for case focused research and study of daily situations that request a unique approach, a step beyond generic statistical statements. Speech maps are an easy to use and convenient research tool that captures the idiolect (language unique to an individual or social group) that people use to communicate their attitudes about an issue. They are also a practical tool suitable for brainstorming, problem solving, decision making, design and writing of public information, education campaigns. By using a speaker’s natural language data (oral, written statements or transcripts) the analyst reads and underlines those language elements that depict a speaker’s attitude. The analysis is based on the axes of reference and content, as well as the ‘tie arguments’, which create the element of coherence that wraps up the ‘individual logic’ of an attitude and they are used to explain, as well as to predict a speaker’s special language choices in the form of a vocabulary web. A quick and easy to follow taxonomy chart of possible language choices guides the investigator in an organized and systematic way at every step. A series of verbal examples from teachers and trainees regarding adult education and lifelong learning are used to illustrate the speech maps approach.

*Keywords:* adult education, communication tool, idiolect, language data, speech maps, vocabulary web.

### **Introduction**

Information society is a term which has been introduced in our lives along with terms, such as ICT, knowledge society, literacy, lifelong learning [Torres, 2005]. The educational gap that exists through many countries or, even, among areas of a country is expected to be narrowed through the use of technologies, the proper education of teachers, community support [Guttman, 2003]. The acquisition and expansion of knowledge throughout life, the development of language

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understanding and communication skills and competences as well as social inclusion through education are some of the components of the lifelong learning policy context [EU, 2006].

### **Information Literacy**

The European Commission [2004] describes eight key competences, which are necessary for the knowledge society. These eight domains are

- Communication in mother tongue;
- Communication in a foreign language;
- Mathematical literacy;
- Digital competence;
- Learning to learn;
- Interpersonal competence;
- Entrepreneurship;
- Cultural expression.

Each one of these competences is defined in terms of knowledge, skills and attitudes. Although the word 'information' is not explicitly referred to the overview of these domains, elements of these competences help us understand another relevant term, information literacy (IL). The term is considered to be a continuum of skills, concepts, attitudes, and experiences related to information access, understanding, evaluation, communication, application and value [Marchionini, 1999, p. 7]. In the Alexandria Proclamation is described, along with lifelong learning, as 'the beacon of the Information Society, illuminating the courses to development, prosperity and freedom...empowers people in all walks of life to seek, evaluate, use and create information effectively to achieve their personal, social, occupational and educational goals.' One of the objectives set by UNESCO for the period 2008-2013 is to build inclusive knowledge societies through information and communication, make information literate communities, which will enhance the capacities of users to access, analyse and determine the relevance and quality of information beneficial to their needs [UNESCO, 2008, p. 31]. The five elements which constitute IL are

- Recognising information needs. It refers to distinguishing if the given information is appropriate and adequate or further information is needed;
- Locating and evaluating information. It recognises the importance of critically examining the quality and reliability of sources and information itself before applying it;
- Storing and retrieving information. The use and easy access of databases, libraries, files is important for both retrieving and transmitting information;



- Making effective and ethical use of information, recognising that there are ethical and unethical uses of information;
- Applying information to create and communicate knowledge. Thus, it is recognised that not only the reception and passing of information are important, but the transformation of information into knowledge.

Horton [2008] presents the eleven stages of IL life cycle starting from the realisation of the need to get information to solve a problem, identifying the information, through organising, analysing, interpreting, evaluating, communicating information to utilising it, reusing it, protecting it or discarding it, when no longer needed. So, it becomes clear that IL focuses not only on gathering information through ICT, but also on the skills needed to critically review information, apply it and produce knowledge through it. Vital for IL is the element of communication, which refers to transmission and reception of information, as well as making sense of the message(s) embedded in information [Sayers, 2006].

This generic element of IL is also mentioned by Sharon Weiner [2010], 'information literacy is applicable in all disciplines, involves metacognition, and is a way of thinking combined with a set of skills...it doesn't belong to any single discipline, but instead belongs to all of them'.

In the global society of knowledge and digital communication technologies, the opportunities for dialogue and global communication literacy are significantly increased. This paper discusses the PSLO research and dialectic tool which is based on the universal language process by which individuals and social groups verbalise similar attitudes in different ways to distinguish their unique identity and personal culture as well as to turn dialogue into joint social action through the use of proverbial language (practical experience based, didactic statements of universal truth and value). Based on the values of natural curiosity, mutual respect and unassuming use of language the PSLO method is a useful tool to facilitate communication literacy and link separate lines of monologue into meaningful dialogue and joint action using the concept of idiolect (individual use of language about an issue) at a communication level.

### **Speech Maps**

The speech maps theory is based on ongoing PSLO (Psycho-Social Lexical Orientation) research [Papalois, 1992] and analyses a speaker's (individual, social group) idiolect at a communication level. According to speech maps theory, each word has two layers of definition: denotation, connotation at speech community level and a third idiolect manifestation definition at an individual level. Denotation is the dictionary definition of a word (e.g. America denotes the country south of

Canada and north of Mexico, [Heidrich, 2004]. Connotation is the thoughts, feelings and images associated with a word at a language community level (e.g. America connotes freedom, individualism and opportunity). Manifestation is a short statement that expresses in a nutshell the idiolect that organises a speaker's viewpoint and common sense logic about an issue. During manifestation people differentiate their individual definition of an issue in relation to a speech community's definition of the same issue. Specifically, the speaker selects those appropriate language tools for individual expression (figures of speech, tenses, familiar vocabulary, grammatical forms and syntactic structures) and focuses attention on those aspect(s) of an issue that are of personal relevance. In terms of evaluation, the speaker forms a positive, negative or neutral evaluation based on a dialectic among feelings, beliefs and facts. In terms of filtration, the speaker announces the logic on which evaluation is based and the evidence of the personal element of evaluation takes the form: 'X - Not Y'. Here is an example of the manifestation definition at a psycho-social lexical level of the word America based on the specific individual's lifelong learning with regard to the word America: 'My brother lives in America. In Michigan. *America is not all about politics. America is a great country, nice people, lots of history, cool shops and awesome places to visit*'. 'I have visited America several times. My sister lives there. America is a great country, nice people, great universities, great history, awesome places and cool shopping'. The above statement is clearly a positive evaluation of America (as indicated by the words great, nice, cool, awesome). However the speaker 'puts' a filter to differentiate between the country, the people but not its politics.

Speech maps research is based on the psycho-social lexical orientation of a speaker's statements (oral, written statements and transcripts) and is a simple, quick and easy to follow way to make sense of what people aim to communicate in real life or virtual settings. Researchers and practitioners in lifelong learning can use the speech maps approach in decision making and negotiation in training (what is at stake in training communication), communication planning ('speak the same language'), cross-checking, triangulation and pattern generalisation in research.

No previous linguistic training is needed to do speech maps. Through careful listening or reading of a text, a word's manifestation (X not Y) emerges and is highlighted. Based on the language evidence present in this specific part of text, the next step is to draw a circle and put in it the keyword (noun) on which evaluation is based. If more than one aspect of an issue is discussed more than one concentric circles are drawn. In the form of rays drawn from the circle(s) outwards you put communication elements selected and stressed by the speaker as special like: choice of tense (emphasis on the past, present or future, a finished or not yet

finished action), person (first/I, We, second/you/You, third He, She, It/They), vocabulary (relevant adjectives, adverbs, speech figures), sentence structure emphasis (subject, verb, object), direction of evaluation (positive, negative, neutral), content of evaluation (feelings/emotions, facts/indisputable information used as evidence, beliefs/ideas, suggestions, knowledge). A word's speech map can be as detailed and colourful (use of different colours to illustrate different points) or as basic according to practical or research purposes and time demands. Speech maps verification and final testing is achieved through text evidence that supports communication coherence (ideas that fit together in a natural and sensible way) and is triangulated by cohesion (a speaker's statements over time or in different circumstances about an issue) and the speaker's final approval (where possible).

### **Speech Maps – an example**

A news text accessed on the Internet (BBC Sport, see Appendix) about 'Candidates for 2016 Olympics' is used as an example to illustrate the four speech maps used by the four different candidate city representatives to support their bid under the article's 'What they say' heading in Copenhagen, Denmark, on 2 October 2010. In this specific text, all statements are de facto expected to be positive and refer to a future time frame due to the nature of their target of communication: to successfully win the Olympic Games for the host city of their country.

#### **Speech Map no. 1 Chicago**

Manifestation definition: 'It's a very city-central Games –not just a compact Games plan but one that's in the heart of the city'. Here, Chicago 2016 spokesman Patrick Sandusky uses the figure of visualisation to paint a picture that 'people will walk out of their hotel and *straight* into sports venues, or our theatres, our museums, our restaurants'. From everything that Olympic Games mean (connotation) in the language community of our global society, Chicago's Olympic bid focuses attention on the noun sports venues.

The practical/pragmatic value of Chicago's bid gives emphasis on the third person (they – the people who will participate or attend the Olympics), future time reference (brought closer by painting a realistic picture through visualisation) and a positive factual perspective.

#### **Speech Map no. 2 Madrid**

Manifestation definition: 'Vitality is not a joke, it's a serious proposal..not just 16 days of extraordinary competition but a very joyful 16 days and a very happy seven years in the run-up'. The thematic point chosen by Madrid's representative Juan

Antonio Samaranch Jr., Spanish IOC member as relevant to the other Olympic Committee members is: Olympic family. The first person (Juan Antonio Samaranch Jr., 'I can almost promise' in singular and plural form on behalf of the Spanish Olympic Games Organising Committee ('we will make all the members of the Olympic family, everybody who has anything to do with the Olympic Games, not just 16 days of extraordinary competition but a very joyful 16 days and a very happy seven years on the run up'). Future is the point in time emphasised as expected due to the nature of the speech task at hand (Olympic bid). Finally, belief is the positive direction emphasised by Madrid's representative (Joy and vitality can ensure an extraordinary competition and a very joyful 16 days and a very happy seven years in the run up).

### **Speech Map no. 3 Rio de Janeiro**

Manifestation definition: 'To give an opportunity for new continents, new cities, new countries, a new atmosphere for the Games' (a case of new versus old).

The word 'opportunity' is the chosen thematic point to be presented as relevant to Olympic Games and the IOC Committees final decision by Carlos Nuzman, president of Rio 2016 bid committee. The first person in plural form ('we have a feeling...') and the present time ('many IOC members wish to change') demonstrate clearly that the Rio de Janeiro bid upholds president Jacques Rogge's 'rotation of continents' philosophy offering a 'perfect timing' option. Finally, it is a positive belief on which Brazil's bid is based in terms of Direction ('It is clear that the youth of the world come from every part of the world').

### **Speech Map no. 4 Tokyo**

Manifestation definition: 'We have the budget already secured in cash...It is quite meaningful' (a case of budget secured in cash v. not secured in cash).

The thematic point inside Japan's Olympic bid is secured budget. Hidetoshi Maki, deputy director general, Tokyo 2016 uses the first person ('I am so happy...we have the budget already secured...I think this is a strong point') to support his bid. In terms of time Japan's case should stand somewhere in the middle between past and present as it emphasises their ongoing work over the years to secure the financial aspect of the bid. Finally, the positive direction of Japan's bid is based on fact ('budget already secured').

## **Conclusion**

The realisation of the Knowledge Society requires many prerequisites, such as free access to information, narrowing the educational and digital divide, free

expression, training for proper use of ICT. The transformation of information to knowledge passes through, among others, analysing, understanding and effectively communicating information. Speech maps focus on the communication element of information offering a tool for analysing individual language patterns – idiolect and their implications for clear communication and effective strategies in meaningful learning.

## **BIBLIOGRAPHY**

- European Commission, 2004, *Implementation of 'Education and Training 2010' Work Programme. Key Competencies for Lifelong Learning. A European Reference Framework*. EU.
- European Communities, 2006, *Information Society and Education: Linking European Policies*. Luxembourg: Office for Official Publications of the European Communities.
- Guttman, C., 2003, *Education In and For the Information Society*. UNESCO, Paris.
- Horton, Jr., F. W., 2008 *Understanding Information Literacy. A Primer*. UNESCO, Paris.
- Marchionini, G., 1999, "Educating Responsible Citizens in the Information Society", in *Educational Technology Magazine*, 39, 2, pp. 17-26.
- Papalois, V., Theodossopoulou, M., 2008, "UNESCO'S Alphabet of Hope Dialogue on Literacy: Using PSLO Natural Language Analysis in Lifelong Learning Research and Communication Literacy", in *Diaviou*, 3-11.
- Papalois, V., 1992, *Student Council Participation among urban High School Students in Athens, Greece* (in Greek). Doctorate Thesis Manuscript. School of Philosophy. University of Athens, Greece.
- Sayers, R., 2006, *Principles of Awareness-Raising for Information Literacy, a Case Study*. UNESCO, Bangkok.
- Torres, R.M., 2005, *Word Matters: Multicultural perspectives on information societies*. C & F Editions.
- UNESCO, 2008, *Medium Term Strategy 2008-2013*. UNESCO, Paris.
- UNESCO, 2008, *Towards Information Literacy Indicators*. Conceptual framework paper prepared by R. Catts and J. Lau. UNESCO, Paris.
- Weiner, S., 2010, "Information Literacy: A Neglected Core Competency", in *EDUCAUSE Quarterly Magazine*, 33, 1.

## **Appendix**

### **Chicago**

#### **Overview:**

Chicago was chosen ahead of four other US cities to bid for the Games – Houston, Los Angeles, Philadelphia and San Francisco.

The city plans to build five new permanent venues and 11 temporary ones, with 22 of their planned 27 venues in four clusters within 15km of the Olympic Village, which will be based south of McCormick Place and itself house 11 venues. The new venues will compliment existing structures such as Soldier Field, United Center, Sears Center and Wrigley Field.

The bid costs (\$49.3m/£33.3m) are being borne by the private sector, as are the costs of the Games, while infrastructure costs will be financed by the US government.

**Pros:** It is expected that Chicago's world-class architecture, renowned skyline, multi-cultural, historical, and pop-cultural contributions will be positive factors as the Olympics bid is weighed, while the city also boasts significant transportation infrastructure.

Although there is no official IOC rotation policy, the Americas may have an edge as previous games will have been held in Asia, Europe, and Australia: London, Beijing, Athens, and Sydney.

**Cons:** In a long standing dispute with the IOC, some IOC members also resent the large share of revenue taken by the United States Olympic Committee. Additionally, the controversy over the participation of Cuba in the 2006 World Baseball Classic is said to have hurt America's chances.

**What they say:** We've got two great plusses, we think – the City itself, the passionate, sports-loving diverse people of our city who really want to welcome the world back to the States. And the plan itself is also a real winning plan – not just a compact Games plan but one that's in the heart of the city.

“So if the Olympics come here people will walk out of their hotel and straight into sports venues, or our theatres, our museums, our restaurants. It's a very city-central Games.”

*Chicago 2016 spokesman Patrick Sandusky*

**Face of the bid:** A feast of the rich and famous are backing the bid. Basketball legend Michael Jordan has become an unofficial spokesman for Chicago's cause, while President Barack Obama – a former Illinois senator – media mogul Oprah Winfrey and Olympic champion swimmer Michael Phelps have also lent their considerable support.

**Fact of the bid:** Chicago was actually chosen to stage the 1904 summer Olympics, but the Games were moved to St Louis to coincide with the World's Fair.

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## **Madrid**

### **Overview:**

Madrid, one of the few major European capitals yet to host the Games, hopes to follow in the footsteps of Barcelona, which brought the Olympics to Spain in 1992. Madrid's pedigree is a good one, with 85% of venues already built and in place, and a history of hosting Olympic qualifying events. Split into two clusters, the competition venues will be shared between the Eastern Zone and the River Zone, with Madrid currently completing new swimming and tennis venues and looking to expand and modernise existing sporting facilities.

The city's bid – estimated cost \$42m (£28.6m) – will be entirely underwritten by the government.

**Pros:** Madrid hope to build on their 2012 bid which, though ultimately unsuccessful, prompted a good reaction from the IOC – it was overall second in technical evaluation, while the city was ranked top in seven categories; “Government support, legal issues and public opinion”, “General infrastructure”, “Environment”, “Sports venues”, “Olympic Village”, “Transport concept” and “Overall project and legacy”.

**Cons:** The greatest downfall of Madrid's bid, though, could be that the 2012 summer Games is scheduled in London and the 2014 winter Games due to take place in Sochi, Russia. Staging three consecutive Olympic Games in Europe would, on the face of it, appear unlikely.

**What they say:** “I can almost promise that we will make all the members of the Olympic family, everybody who has anything to do with the Olympic Games, not just 16 days of extraordinary competition but a very joyful 16 days and a very happy seven years in the run-up. Vitality is not a joke, it's a serious proposal.”

*Juan Antonio Samaranch Jr, Spanish IOC member*

**Face of the bid:** Flamenco dancer Sara Baras has been named official envoy of the bid, while officials and players from local football clubs Real and Atletico Madrid - including Raul and Iker Casillas - are lending their support.

**Fact of the bid:** In the 2012 bidding process, Madrid actually placed first in the third round ahead of London and Paris, before being eliminated in the fourth round.

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## **Rio de Janeiro**

### **Overview:**

The Brazilian Olympic Committee chose Rio de Janeiro ahead of Sao Paulo three years ago to bid for the 2016 Olympic Games. It is the first time the city has proceeded to the candidature stage after failed attempts for the 1936, 1940, 2004 and 2012 Games.

Rio plans to stage all the competitions inside the city, bringing “dynamics to the games and facilitating the athlete's interaction”, according to the bid website. There

will be seven competition centres in four Olympic regions – Barra, Copacabana, Deodoro, and Maracana - with football matches held in the cities of Belo Horizonte, Brasilia, Salvador and Sao Paulo.

Rio's bid is divided into a \$2.8bn (£1.92bn) budget for operating costs, and \$14.4bn (£9.90bn) for construction and security.

Also, the city's infrastructure - including major, and recently renovated, airport Antonio Carlos Jobim International Airport (Galeao) - will aid the city's bid.

**Pros:** Rio's successful staging of the Pan-American Games in 2007 - labelled the “best in history” by the president of the Pan-American Sports Organisation - and their future hosting of the 2014 World Cup will only add to the city's experience and bolster their burgeoning reputation.

The fact that giving the 2016 Olympics to Brazil would uphold IOC president Jacques Rogge's “rotation of continents” philosophy also lends great weight to the potential success of the bid.

**Cons:** The city can count itself somewhat fortunate to have made the last four after scoring below Doha in the IOC's weighted –average score, eventually only winning through – it is believed – because of Doha's small population, lack of facilities and plans to stage the Games outside of the IOC's proposed window.

**What they say:** “We have a feeling that many IOC members wish to change, to give an opportunity for new continents, new cities, new countries, a new atmosphere for the Games. It is clear the youth of the world come from every part of the world.”

*Carlos Nuzman, president of Rio 2016 bid committee*

**Face of the bid:** The bid has great political and popular support, from Brazil and other countries in the region, but the 'face' gets no more famous or influential than legendary footballer Pele.

**Fact of the bid:** Brazil has already secured the right to host the 2014 World Cup and has its sights on the fourth double hosting in history; after Mexico in 1968 and 1970, Germany in 1972 and 1974, and the United States in 1994 and 1996.

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## Tokyo

### Overview:

Tokyo was selected as Japan's candidate city in August 2006, beating off competition from Fukuoka on the island of Kyushu and, reportedly, Osaka, Sapporo and Nagoya.

Tokyo is touting “the most compact and efficient Olympic Games ever” with a dramatic setting on the waterfront, enabling the city to redevelop a rundown area,



previously primarily used for industry and shipping, just as London and Barcelona did in previous hostings.

Tokyo plans to construct a new 100,000 –seater stadium but, of the 34 planned venues, 23 already exist with many venues used during the 1964 Games set to be refurbished.

A budget of 400bn yen (£3.06bn) for construction of the venues and infrastructure has already been put aside by the government, while organisational costs of 310bn yen (£2.37bn) will be raised through sponsorship and marketing, although it has been underwritten by government.

**Pros:** The city's successful staging of the 2002 Football World Cup, 1964 Summer Olympics and 1972 and 1998 Winter Olympics mark it out as arguably the most experienced player in the last four, while it will also boast excellent public transportation, including three ring roads which are currently being built around the city to help reduce congestion problems, and ample accommodation for visitors.

**Cons:** Tokyo could suffer from the fact that Beijing hosted the Games in 2008, although it would by no means be the first time the Olympics have been staged on the same continent within eight years.

**What they say:** “I'm so happy that we have the budget already secured in cash. It is quite meaningful and I think this is a strong point of [the bid].”  
*Hidetoshi Maki, deputy director general, Tokyo 2016*

**Face of the bid:** Only a few top-level sports stars hail from Tokyo and even fewer are recognisable outside of Asia - but Hidetoshi Maki has dismissed that as a failing, saying: “The Olympics is not staged by the person, it is staged by a team. We are promoting the team and the city itself.”

**Fact of the bid:** London's successful 2012 bid has had a great influence on the Tokyo 2016 bid, with Maki adding: “We are so impressed with the London bid. They believe that the Olympics promote sport to the youth and all the ages. That idea is followed by Tokyo.”



## **COLLABORATION VERSUS COMPETITION: TRENDS IN ONLINE LEARNING FOR WORKFORCE DEVELOPMENT**

GARY E. MILLER<sup>1</sup>

### *Abstract*

Since its inception early in the Industrial Revolution, distance education has been one of the ways that higher education institutions have adapted to radical changes in the social and economic environment in which they operate. In turn, it has been shaped by changes in society and, especially, changing workforce needs. Today, online learning is moving distance education into the mainstream, blurring distinctions between on-campus and off-campus instruction as higher education transforms itself to respond to the forces for changes that are being wrought by the Information Revolution. Institutions, freed of geographic boundaries, increasingly are collaborating to serve both traditional students and the current workforce.

### **Some Historical Parallels**

University-level distance education in the United States began in 1892, when the University of Chicago, the University of Wisconsin, and The Pennsylvania State University launched the first U.S. college-based correspondence study programs. These were times of great change in the United States. The Western frontier had closed in 1891. The nation was absorbing several massive waves of immigrants. At the same time, it was shifting from an agrarian to an industrial economy, accompanied by large-scale urbanization and the development of transcontinental railroads and other innovations. As industry attracted more people to the cities, there was an urgent need to improve the productivity of the nation's agricultural base and, simultaneously, to create professionals – engineers, chemists, managers, etc. – to support industrial growth and to develop a cadre of teachers to serve the children of new Americans. Universities – especially the new state “land grant” universities that had been created specifically to respond to the needs of the new industrial economy – initially used the new Rural Free Delivery postal service to deliver correspondence courses designed to improve rural life and help secure the country's agricultural base.

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For much of the next century, most American distance education was housed in public state universities. By the 1970s, the first impact of the Information Revolution was being felt, and other institutions – community colleges and professional schools began to use distance education via broadcast, cable, and satellite television to reach adult students locally and to serve specific workforce populations on a regional or national level. Consortia like the National Technological University developed to better coordinate delivery of professional graduate degrees at a distance to employees of major companies. A variety of other collaborations – such as the International University Consortium, which adapted British Open University materials for use by other institutions, and the National University Teleconference Network, which delivered satellite teleconferences at college and university sites nationally – developed to allow institutions to share media-based course materials and to expand the market for their programs.

### **The Information Revolution and the Need for Transformation**

Today, a generation into the Information Revolution, education is again being transformed to meet changing social needs. Distance education is being redefined by the dramatic changes not only in technology but also in the social, political, and economic forces that are driving what has been called by various thinkers the Conversation Economy, the Age of Cognition, the Knowledge Society, and the Global Information Society.

We can identify several broad forces that are driving this transformation:

*The Societal Demand for Education* The Industrial Age required that about 25 percent of secondary school graduates moved on to higher education to provide society with managers and professionals needed to drive an urbanized industrial economy. In contrast, a March 2010 draft of the National Educational Technology Plan in the U.S. Department of Education stated a goal of increasing the proportion of college graduates to 60 percent by 2020<sup>2</sup>. This goal requires that access to education be extended not only to traditional-age students but to larger numbers of working adults than has been the case in the past. It also suggests that larger numbers of high school students must leave school prepared to go on to higher education and, in turn, that society must provide more equitable access to education at all levels.

*The Changing Work Environment* The need for a more educated workforce is only one of several ways in which the work environment is being transformed in the Information Age. Today's workforce is less geographically defined –

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<sup>2</sup> *Transforming American Education*, p.3.

knowledge-based companies are less reliant on local workforce more on access to a distributed workforce. As companies rely more on continuous, bottoms-up innovation and problem-solving to remain competitive, collaboration within working teams is becoming more important than individual performance. Moreover, it is increasingly clear that education for work must continue throughout one's working life, as people increasingly have multiple careers.

*The Changing Role of Knowledge* Throughout the agricultural period and well into the industrial period, the primary roles of education were to conserve knowledge and to pass it on to new generations. In the industrial period, higher education assumed a new role: the creation of new knowledge through research; this translated into a new pedagogy that included laboratory and experiential learning. In a rapidly changing, information-rich environment, the role of knowledge in education is again transforming. Increasingly, the role of education is to develop in students the ability to critically analyze information, transform that information into usable knowledge and to apply that knowledge to solve problems and to create innovations.

### **A New Workforce Education Mandate**

These forces are shaping a new workforce education mandate. People have begun to notice that the Information Revolution is not so much about how quickly information is broadcast, but about how it brings people and ideas together in new ways. We are beginning to realize that the Knowledge Society, in reality, is a "Skills Society." Education in this environment centers around the need to create functional communities in a new working and social environment, to educate workers who can innovate and shape change in the workplace and in the broader society, and to develop new critical workplace skills of inquiry, information validation, knowledge creation, problem solving, and collaboration through virtual teams. Providing access, convenience, flexibility, and cost-effectiveness will continue to be important issues, but the emerging question for the next decade or so is: how can we help individuals learn how to build and sustain new communities built around collaboration and sharing of knowledge to solve both local and, increasingly, global problems?

*An Emerging Pedagogy* A new pedagogy is emerging as higher education responds to these demands. This pedagogy recognizes that how we learn should reflect how we live and learning should be an active process that is resource-centered and inquiry-based and that develops the student's skill in collaborative problem solving. Called the Community of Inquiry (<http://communitiesofinquiry.com/>), this approach centers education at the

intersection of three forces: the ability of the student to identify with others in a trusted learning community, the ability of students to construct knowledge and confirm it's meaning, and the teaching process. Online social networking applications like wikis and blogs are essential to helping institutions use the Community of Inquiry pedagogy at the scale needed to serve workforce education needs. The online environment allows institutions to provide the same pedagogy to both on-campus and distant students.

*A Changing Sense of Community* In the agrarian and industrial periods, "community" was defined largely by geography. A community was a village or a neighborhood of people who lived inter-dependent lives. In a globalized economy that kind of highly localized interdependence is harder to find. Online learning further removes geographic and time as defining characteristics of interaction among students and between students and the institution. We need to re-perceive the whole idea of community to understand how we are inter-dependent in today's world and to develop the skills needed to work together in a new environment.

For higher education, new ways of thinking about community have implications on at least two levels. At the *institutional* level, we need to re-define the communities we serve and re-articulate our mission in those communities. For most of us, distance education has meant reaching very far beyond our local campus community in order to aggregate markets for specialized programs or serve widely dispersed professional groups. Today, we are starting to see institutions also use online distance education to more effectively serve local commuting students who cannot always come to campus. At the *faculty* level, new kinds of academic communities are emerging that may, in the long run, redefine the relationship between faculty members and their institutions – and, as this paper will explore, define new relationships among institutions.

*Implications of Online Learning for Transformation* For the past decade, online learning – mostly conducted as a new mode of distance education – has been evolving from experiments to a sustainable innovation in many traditional institutions. Online learning is both a symptom of the changes in the broader society and a tool of transformation. Its growth has several implications for educators if higher education is to meet the workforce needs of the Information Society.

- Just as universities incorporated laboratories into the curriculum during the industrial period, they must mainstream the use of web-based technology to meet today's needs.
- The adult student – long treated as a secondary constituency by traditional universities – must move into the mainstream.

- Institutions must recognize that geography no longer defines their students or the resources that the institution can bring to meet student needs. Fourthly, institutions must adapt to a blurring of traditional distinctions between teaching and research and between on-campus and off-campus teaching.

These implications were reinforced in a national survey conducted by I. Elaine Allen and Jeff Seaman and in 2006. Their report, *Growing by Degrees*, noted a trend toward the convergence of distance education and campus-based instruction. They found that 44 percent of institutions that offer on-campus master's degrees also offer master's degrees online<sup>3</sup>, and 65 percent of institutions that teach online use primarily core faculty to teach their online courses<sup>4</sup>.

### **A New Era of Collaboration**

Just as communications technologies led to institutional partnerships for distance education in the 1970s and 1980s, we can now see that information technologies – generally grouped under the umbrella of online distance education – are stimulating new institutional collaborations designed to serve workforce needs. Four examples will illustrate the growing range of collaboration that is emerging.

*Collaborations to Share Students* The elimination of geography as a barrier between working adults and the academic resources they need is a significant change in the overall educational ecology. In response, institutions increasingly are partnering to share resources in order to meet demand. One example in the United States is the Great Plains Inter-Institutional Distance Education Alliance – the Great Plains IDEA (<http://www.hsidea.org/>). In this alliance, eleven institutions in the American mid-West have collaborated to develop and deliver professional graduate programs that no one of the institutions could do effectively using solely its own resources. Each participating institution develops and delivers online specific courses that meet the degree requirements. Since 1999, the alliance has fostered degree programs in Community Development, Dietetics, Family Financial Planning, Merchandising, and Agriculture. Programs are developed by inter-institutional faculty teams. Students matriculate at the institution of their choice, but take courses from all of the institutions involved in the program.

*Collaborations to Share Courses* The online environment allows institutions to share specialized courses with students at other institutions. In the United States, the Committee on Inter-Institutional Cooperation – a group of public universities

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<sup>3</sup> *Growing by Degrees*, p. 1.

<sup>4</sup> *Ibid.*, p. 2.

Eastern and Midwestern states – created Course Share (<http://www.cic.net/Home/Projects/SharedCourses/CourseShare/Introduction.aspx>), a collaboration that uses online delivery to aggregate students from multiple institutions into courses in seldom-taught languages, chemical informatics, speech and hearing sciences, and other disciplines.

*Collaborations to Serve a Mutual Client* The University of Manchester in the United Kingdom and The Pennsylvania State University in the United States combined resources to serve two multinational companies with a collaborative Master's Degree in Project Management. The two institutions agreed on a common curriculum and shared online content materials. Courses are offered online, with two company-sponsored residencies. Employees in North America can get a degree from Penn State; employees in Europe can get their degree from the University of Manchester.

*Collaborations to Share Materials* As the number and variety of online courses grows, the opportunity for faculty members and institutions to openly share content beyond traditional institutional boundaries has also grown into an international movement. The spirit of the Open Educational Resources movement was captured in the Cape Town Declaration. Developed in 2007, the declaration has since been signed by more than 2,000 individuals representing 220 organizations worldwide. It reads, in part:

. . . we call on educators, authors, publishers and institutions to release their resources openly. These open educational resources should be freely shared through open licenses which facilitate use, revision, translation, improvement and sharing by anyone. Resources should be published in formats that facilitate both use and editing, and that accommodate a diversity of technical platforms. Whenever possible, they should also be available in formats that are accessible to people with disabilities and people who do not yet have access to the Internet.

One example of how OERs are encouraging collaboration is the AgShare Open Educational Resources Project at Michigan State University. Funded by a \$1 million grant from the Bill and Melinda Gates Foundation, the project aims “to enable institutions of higher education in Africa to provide free, open access to agriculture education materials in order to improve agricultural practices on the continent and help build sustainable economies.” Specifically:

The program will enable faculty and student researchers, NGO representatives, farmers, and others to form learning networks and share content modules, textbook



materials, and videos via the Internet. In remote areas where the Internet is less accessible, information will be distributed through DVDs and printed materials.<sup>5</sup>

The Open Educational Resources movement promises to revitalize the vision of faculty members as participants in international academic communities. It also requires that faculty members who create OERs be consciously aware of the cultural context in which the content operates. On one hand, inadvertent and unnecessary references to local culture could lead to concerns about cultural imperialism and make the OER less valuable to other faculty members. On the other hand, educators should not avoid providing appropriate cultural context to content in online courses. A teaching perspective that looks beyond the initial use of content is needed to make OERs truly powerful educational tools.

### **Collaborating Through Corporate Partnerships**

Online learning has implications for how institutions engage with employers to develop employees. In today's online distance education environment, geography is no longer a barrier to educating a distributed workforce. Online education has few geographical or time boundaries. All companies conceivably have access to national and international providers to educate their workforce at all levels without losing personnel while they are being educated. They can choose between open enrollment or contract programs. In this new environment, many companies have created internal online training capabilities. In addition, many are developing new relationships with colleges and universities to provide instructor-led noncredit training and degree programs to their employees. Multi-institution partnerships with companies are increasingly common, so curricula can still be tailored to employer needs. Two examples from the United States may illustrate the potential impact of online industry/education collaborations for workforce development.

*National Coalition for Education and Learning* (<http://www.nactel.org/>) This U.S.-based coalition, managed by the Council for Adult and Experiential Learning, involves six major telecommunications companies, the Communications Workers of America, Pace University and other online education providers. It offers an associate degree in Applied Information Technology with specializations in video technology, wireless networking, and two other fields, plus a Bachelor of Science in Telecommunications.

*Energy Providers Coalition for Education* (<http://www.epceonline.org/index.html>) This collaboration includes 24 energy

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<sup>5</sup> *Philanthropy Digest Website.*

companies, four professional associations, two unions, five colleges and universities, and a virtual high school that use online distance education to develop the workforce in the energy industry. It offers industry employees associate and baccalaureate degrees and credit certificate programs in electric and nuclear power, natural gas, and electrical engineering. The coalition lists among its goals the following:

Employers gain immediate access to online education programs that help meet workforce needs by providing the knowledge and skills necessary for new workers to enter the industry and existing utility employees to move forward in their career.

As a coalition, members influence EPCE's strategic direction and determine how to best leverage industry sponsored online education to meet current and future workforce challenges.

Members review and influence the content of the programs, ensuring they are up-to-date and change as the industry changes.

Employees receive substantial tuition discounts, which can translate into reduced tuition assistance and training expenses.

Members will have access to a source pool of trained potential employees as the program matures.

The EPCE programs serve as a solid education platform for further company-specific training<sup>6</sup>

### **Guiding Principles for Collaboration**

Several guiding principles can be gleaned from these examples. First, such coalitions require a clear statement of purpose and benefit for each partner. The working relationship between educational institutions and employers must be marked by collaboration rather than a more traditional customer/supplier relationship. Concrete statements about benefits and expectations define the collaborative nature of the relationship and provide a basis for resolving differences when they arise.

Second, collaboration assumes shared responsibility among participating institutions and employers for program identification and support and for quality control. These should be stated for each partner. The governance structure also should include a clear statement of curricular authority and a formalized, but open oversight structure.

When the coalition includes multiple employers and multiple institutions, members of each sector must function as colleagues rather than competitors. In other environments, the employers often compete, just as the institutions compete

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<sup>6</sup> Energy Providers Coalition for Education website, *Benefits of Membership*.

for students. However, they must work as colleagues within the context of the collaboration; the parameters for this should be explicated in the agreement.

The online environment also blurs the distinctions between the three primary missions of most higher education institutions: research, teaching, and service. In developing partnerships, institutions and employers should consider the interactions among these three missions and, where appropriate, encourage collaboration in all three areas.

A variety of other policy issues may need to be addressed, depending on the situation. For instance, if institutions expect to share course content, copyright issues should be addressed at the outset of the collaboration to ensure that all parties understand the ways in which content may be shared – either with other institutions in the partnership or with partner employers – and the limitations on sharing. Similarly, if the collaboration involves sharing students (in a multi-institution degree program, for instance) students who are matriculated at one institution may need access to computer-based services at other partner institutions. Other programs may require cost or revenue sharing mechanisms. These kinds of policy issues should be identified early and addressed explicitly.

As online distance education moves into the mainstream of academic life, special attention should be paid to the development of quality standards to guide inter-institutional partnerships. In past generations of distance education, the tendency was to create quality standards and practices that were specific to the distance delivery environment. As distinctions blur, institutions will need to decide whether to maintain separate standards between classroom and distance delivery or to develop new standards that can be applied equitably in both environments. Similarly new institutional policies and practices will need to be developed on a wide range of issues, from copyright to faculty promotion and tenure to workload. Without these, future innovation may be hindered.

### **Conclusion**

Over the past decade, online distance education has helped higher education institutions respond to a dramatic increase in the demand for continuing education among working adults. Distance education, which for decades has flourished in specialized institutions or on the periphery of traditional institutions, is moving into the mainstream of our institutions. Traditional distinctions between campus-based and distance education are blurring, as geography ceases to serve as a natural boundary between institutions and students. Increasingly, the online learning environment offers opportunities for institutions to collaborate to share content, share faculty expertise, and share students in order to better serve the workforce.

As the examples presented in this paper suggest, the new environment encourages institutions to form partnerships to serve common workforce communities. At the international level, specifically, the challenge will be to develop true institutional partnerships, with shared authority and quality control, especially when the partnerships bring together institutions from both developed and developing countries or countries with different educational cultures.

### BIBLIOGRAPHY

Allen, I. E., and Seaman, J., 2007, *Growing by Degrees: Online Education in the United States, 2005*, Sloan Consortium, Needham, Massachusetts, USA.

*Cape Town Declaration*. Retrieved on March 26, 2010, from <http://www.capetowndeclaration.org/read-the-declaration>.

*Energy Providers Coalition for Education, Benefits of Membership*. Retrieved on March 27, 2010, from <http://www.epceonline.org/membership/benefits.html>.

Philanthropy Digest, *Michigan State University Receives \$1 Million From Gates Foundation for Open Education Project in Africa*. Retrieved March 26, 2010, from <http://foundationcenter.org/pnd/news/story.jhtml;jsessionid=Z5RKJTJPGPYFRLAQBQ4CGW15AAAACI2F?id=280200004>.

*Transforming American Education: Learning Powered by Technology (Draft)*, 2010. United States Department of Education, Washington, D.C., USA.

## ON SPECIFIC METHODS OF THE NEW TECHNOLOGIES OF COMMUNICATION AND PERFORMANCE – INDIVIDUAL/COLLECTIVE

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### *Abstract*

“Do not be afraid of computers. I fear lack of them” - said Isaac Asimov. We live in an era of computers and Internet. Life would be much more difficult if it is not impossible without them. Modes of teaching and learning have undergone a revolution in recent years. Many universities and educational institutions offer online courses for students. E-Learning System does not require a classroom, does not require a teacher or a blackboard. One of the features of e-learning is that it is not influenced by age, being valid also for a child but for a 50 years adult or even more. For all of them it is an entirely different experience to learn online, where all communications and correspondence is done through the websites. In this context, the paper presents current trends in online learning in some European countries with particular reference to Romania 's alignment to the new communication technologies. Specifically, the reference is made to distance learning courses in the Faculty of Mathematics and Computer Science and AeL courses in high school.

*Keywords:* e-Learning, Moodle, AeL, distance learning, recommendation systems

### **Lifelong Learning**

Lifelong learning involves the shift from traditional forms of education concerned – first – to transmit knowledge to other learning opportunities, targeted to a greater extent on process and results [Clark, 2007; King 2010; Varanasi, 2010]. How are offered different learning opportunities is essential to encourage and assist adults in access to education.

In addition to the costs of admission, assessment and quality assurance decisions taken by the organizing institution on how access to knowledge, learning content, knowledge structure, methodology of teaching/learning/assessment and learning support arrangements are essential to determine adults to overcome barriers related to age, occupation and personal problems of each.

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Flexibility is an important element in attracting adult learning courses as a way to ensure personalized personality: the student can receive face-to-face, mail and/or online. Such courses are organized in different European countries: Estonia and Slovenia have plans with special learning education. There are personalized programs for adults in France, often within an organization to groups. Individual learning plans are used in Italy Hungary, Portugal and Sweden.

Another way to respond to the needs of the flexibility of independent learning for adults is offered in place, time, duration, and intensity of learning content and it can be adapted to individual requirements. Independent learning can be organized by an institution or may occur remotely by correspondence or online. If supported by a tutor or mentor, such learning can be a useful option for people with little time available. Guided independent study in Belgium is used for secondary education and examinations for public positions. In Estonia, higher secondary schools for adults offer the students the opportunity to learn as external student. CIDEAD is a public body In Spain, providing secondary education through distance work/independent who cannot attend conventional schools.

Public support measures designed to help adults to obtain specific qualifications are almost compulsory education in all countries.

For example, in Ireland and Malta (for literacy) they use educational television and radio programs. Study circles and joint approaches to learning (using mentors and leaders) are believed to be the most appropriate in Slovenia.

Literacy activities are often considered non-vocational education Non-formal adult education, but they can occur as a mean of support in case of formal education. ICT training is covered by the offer of formal and non formal, non-vocational adult education, but tends to be more prevalent in the latter.

Mentoring activities of the non-professional education of adults face many challenges in most countries: limited standards and quality assurance professionals tend to operate as recommendations rather than as mandatory requirements. Increased efficiency through better education and training quality standards is a major theme of reform for most countries. An analysis of a non-professional adult education in various countries is to highlight these essential elements:

- systematic approach to non-professional adult education, formal and non-formal, a comprehensive framework of lifelong learning
- decentralized structures for a better analysis of local needs and opportunities for achieving greater coordination and partnerships
- maintain a balance between values and civic, social and economic needs
- provision of resources to the participants focused on measures and actions aimed at strategically under-represented groups

- maintaining a public network of flexible structures for adult education
- an emphasis on response to learning needs and other needs of adults with low education in the interest of democratic institutions, social cohesion and economic development
- providing effective support for learning, including information and guidance
- An integrated system of qualifications, with provisions for validation of informal and non-formal learning
- develop policies, structures and measures to address issues related to quality assurance and performance results
- systematic approach to initial and continuing training of the education non-professional staff.

The new principle of school education “learn today, produce today”, which replaces the old “learn today, produce in the future” tends to approach the adult education, although key differences remain. For example, “adult educator” has no concept of the decisive meaning of a particular person as in case of children, but primarily means the unfolded work.

### **E-Learning**

E-Learning systems have become very popular in the last decade, especially in schools, colleges and universities. Also, more training institutions use the concept of lifelong learning into their management systems. There are currently marketing a variety of systems such as e-Learning: *Moodle*<sup>5</sup>, *Sakai*<sup>6</sup>, *ATutor*<sup>7</sup>, freely available under open source or commercial and *AeL*<sup>8</sup>, *Microsoft Learning Manager*<sup>9</sup>, *BlackBoard*<sup>10</sup>. These systems are available as desktop applications or as online learning platforms.

Online systems make available a Web space in which teachers posted or edit learning materials, homework for students, etc. These systems also offer online testing. National Council of Academic Evaluation and Accreditation (CNEAA) has set standards on the use of e-learning platform (e-Learning) in distance education. In Romania e-learning was defined as follows [Istrate, 2007]:

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<sup>5</sup> <http://moodle.org>

<sup>6</sup> <http://sakaiproject.org/>

<sup>7</sup> <http://www.atutor.ca/>

<sup>8</sup> <http://advancedelearning.com>

<sup>9</sup> <http://learning.microsoft.com/Manager/Catalog.aspx>

<sup>10</sup> <http://www.blackboard.com>

(1) More broadly, through eLearning (or eLearning) means all educational situations in which significant use ICT facilities.

(2) In a narrow sense, eLearning is a type of distance education as a planned teaching-learning experience organized by a material environment that provides a logical and sequential order to be assimilated by students in their own way. Mediation is done by new information and communication technologies – in particular through the Internet

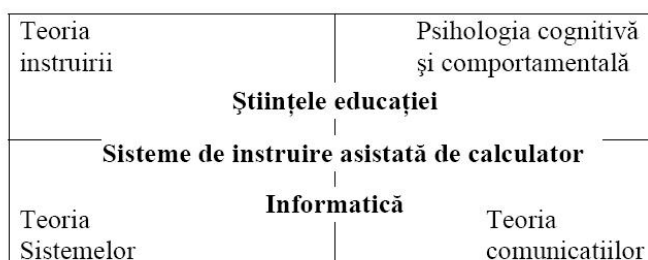


Figure 1. *Computer-aided instruction systems*

In Romania, the academic world, one of the most used e-learning platform is Moodle. MOOD – Modular Object Oriented Dynamic Learning Environment – is a dynamic learning platform developed multi modular in object-oriented environment. This is a course management system (Course Management System - CMS), a software package designed to help teachers to make quality online courses and coordinate the results of learner/student. Such systems are sometimes called Learning Management Systems (LMS) (systems coordination/management of learning), Virtual Learning Environments (ELVs) (virtual learning environments) and Learning Content Management Systems (LCMS) (content management systems learning). Users need only a browser (eg IE, Firefox, GoogleCrome, etc.) to attend a course in Moodle. Written in PHP, Moodle runs without modification on Unix, Linux, Windows, Mac OS X and any system that supports PHP, including most Web providers (those hosting websites). Information is stored in a single database: MySQL and PostgreSQL are best supported, but can be used with Oracle, Access, Interbase, ODBC and others.

Moodle has its origins in an educational project developed by Martin Dougiamas at Curtin University of Technology, based on the idea to improve the management system provided by WebCT platform. Moodle version 1.0 was released on August 20, 2002, as a system for configuring e-Learning for the academic course. Subsequent developments have brought many improvements and extensions of functionality, so that the platform Moodle is now used not only in universities but in schools, primary schools, nonprofit organizations, private



companies, independent teachers and even parents who want to educate their children.

The [Http://moodle.org](http://moodle.org) site is a central point of information, discussion and collaboration between different types of system users of Moodle: system administrators, teachers, researchers, teachers and course developers.

Adopting Moodle platform, allows integration into a genuine international community, with access to educational and scientific experience. The platform has been translated into over 50 languages including: Arabic, Catalan, Chinese (Simple and Traditional), Czech, Danish, Dutch, English (British and American), Finnish, French (France and Canada), German, Greek, Hungarian, the Indonesian, Italian, Japanese, Maori, Norwegian, Polish, Portuguese (Portugal and Brazil), Romanian, Russian, Slovak, Spanish, Swedish...

In the Faculty of Mathematics and Informatics, we have implemented Moodle platform for students from the Department of Distance Learning. It can be accessed at: <http://idinf.ucv.ro/moodle>. Figure 2 shows the main page of this system. Moodle E-learning saves in a database a log of activities performed by users (courses attended, examinations or quizzes performed, marks obtained, accessed resources, topics taught, etc.). Volume of information collected over time becomes quite large and their manual analysis is quite difficult. Data Mining offers us techniques and efficient algorithms that allow automatic analysis of these journals.

To help students, we developed an extension of e-learning system Moodle [Gabrovanu, 2008, pp 1-5], implemented as a module, with the aim of extracting useful semantic metadata generation and supply personalized content to users. This module analyses data on the activities of users in the system. Data are stored in the database and the module extracts some information not directly visible using data mining techniques [Iancu, 2006, p. 55-64]. Basically, the information in this journal is mined and a set of boolean association rules are extracted. These association rules are then moved to Jena rules making judgments.

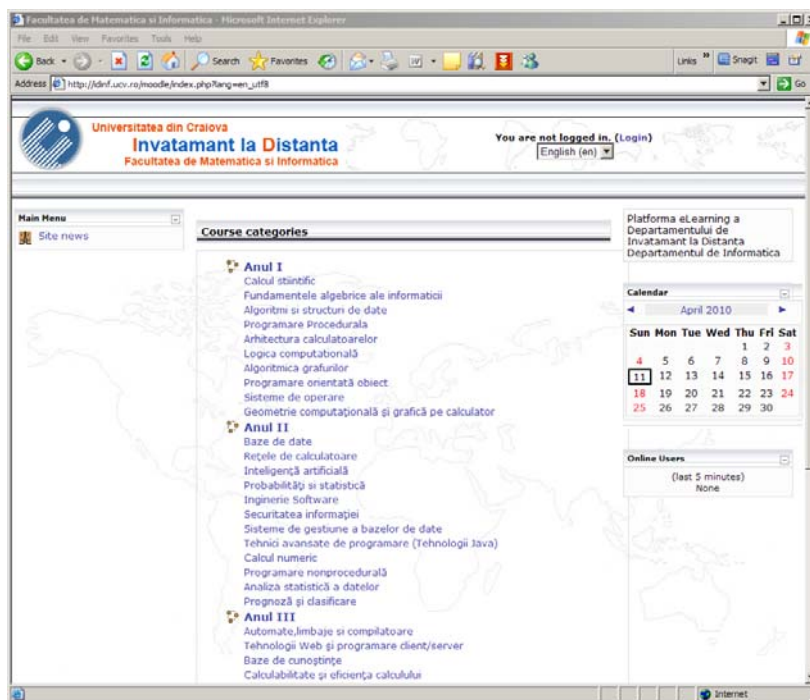


Figure 2. Moodle Platform – Home Page

Based on this information, the module is able to make some recommendations to users and inform them about certain changes in the system. For example, for a student it may recommend to read some resources, to get the necessary knowledge in order to promote a particular test. The module provides information and suggestions tailored to the user who log into the system. For example, the module is able to recommend follow a particular course only to users who have not followed that course yet. Teachers can also use the information extracted from the module in order to improve the quality of training and make recommendations to students.

Example:

1) Consider the association rule derived from data mining process: *82% of students who attended the Web Technologies (WT) course, attended the Web Applications (WA), too.*

Under such a rule, we can recommend certain students who have *already received the WT course, and have already attended the WA*, to consider their choice, possibly in the near term. Consider that student Michael, who followed the WT course was logged in and he goes to the page in which the courses are

presented. We can recommend him to choose WA course next semester, a recommendation that we do not do to another student Mircea who has already attended WA course. These recommendations are dynamically generated by the module, according to the student when the page is accessed by the student and they are not pre-calculated.

2) Consider a more complex association rule, obtained from data mining process: *74% of students who chose the course of WT and passed the T2 test, accessed the resource Res1 and solved the A1 issue.*

The result of applying such a reasoning rule, can guide the student to read some resources and make some actions in order to be prepared for a test. Thus, only for students who satisfy all the requirements of the premise we recommend those parts of the conclusions that have not been done yet. We must suggest to Michael who attended the WT course, and who already accessed Res1 resource, to solve the A1 issue in order to be ready for the test T2.

In higher education, during ES program (Educational System) of the Ministry of Education, in many schools and colleges was introduced e-learning programs AeL (over 2000 installations). ES has been implemented by the software company SIVECO Romania SA, the hardware equipment being provided by Fujitsu – Siemens, HP and IBM.

AeL is optimized for synchronous learning, and the whole lesson is controlled by the teacher. The teacher can compose, control and monitor the lesson using AeL. The AeL teacher can:

- send lesson time activities to students individually, depending on the their capacity or knowledge
- control how students interact with AeL
- administer and monitor tests
- communicate with students via discussion board and e-mail

AeL is one of the factors responsible for strong support in the areas of decision making, control, planning, forecasting, tracking and forecasting.

**Probleme de minim-maxim în plan**

**Aplicația 1**

**Aplicație:**  
Se dă un unghi  $xOy$  și în interiorul lui două puncte oarecare  $A, B$ . Să se găsească  $M \in Ox$  și  $N \in Oy$  astfel încât drumul  $AMNB$  să fie minim.

**Soluție:**  
Fie  $A'$  simetricul lui  $A$  față de  $Ox$  și  $B'$  simetricul lui  $B$  față de  $Oy$ .  
 $A'B' \cap Ox = \{M\}$ ;  $A'B' \cap Oy = \{N\}$ ;

**Justificare:**  
Fie  $M' \in Ox, N' \in Oy, M' \neq M, N' \neq N$   
 $A'M'N'B'$  = drumul de la  $A'$  la  $B'$  prin  $M'$  și  $N'$ , printr-o linie frântă  
 $A'MNB'$  = drumul de la  $A'$  la  $B'$  prin  $M$  și  $N$ , printr-o linie dreaptă  
 $A'M'N'B'$  este minim când  $M'=M$  și  $N'=N$ , deci  $A'MNB'$  = minim. Dacă  $AM=A'M$  și  $NB=NB'$ , atunci  $AMNB$  este minim.

**Pas 1:** Duceți simetricul lui  $A$  față de  $Ox$  și simetricul lui  $B$  față de  $Oy$

$D_{AMNB} =$        $D_{AM'N'B'} =$

Figure 3. AeL platform – math lesson

AEL provides interactive lessons for most subjects in the curriculum. In Figure 3 it can be seen a very friendly graphical user interface of a math lesson in which is presented the solving of problems in the minimum and maximum level.

As well as Moodle programme, AeL offers support for many languages and it is easily reconfigured.

## REFERENCES

- Clark, R. C., Mayer, R.E., 2007, *E-Learning and the Science of Instruction: Proven Guidelines for Consumers and Designers of Multimedia Learning*, 2nd Edition, John Wiley and Sons.
- Gabrovanu, M., Diaconescu, I.-M., 2008, „Extracting semantic annotations from Moodle data”, in *Proceedings of the 2nd East European Workshop on Rule-Based Applications (RuleApps 2008)* at the 18th European Conference on Artificial Intelligence, volume 428 of CEUR Proceedings, pp. 1-5.
- Iancu I., Gabrovanu M., Giurca A., 2006, „A General Quality Measure For Association Rules”, in *Annals of the University of Bucharest, Mathematics and Computer Science Series*, vol. LV , ISSN 77170, pp.55-64.

Istrate, O., 2007, „Elearning in Romania. State of the Art”, in *Elearning Papers*, No. 5/September, 2007.

King, J., James, M., 2010, “Rapid eLearning: creating eLearning solutions within a short time frame and with a limited budget”, in *E-Learning: Enhancing organisational performance through innovative learning tools and strategies*, Workshop.

Varanasi, R., 2010, „Innovations in learning: present and emerging innovative services in teaching and learning”, in *E-Learning: Enhancing organisational performance through innovative learning tools and strategies*, Workshop.



## **TRENDS IN ADULT HIGHER EDUCATION: NEW POSSIBILITIES FOR PREPARING THE INFORMATION WORKFORCE**

CAROL KASWORM<sup>1</sup>

### *Abstract*

The future of adult higher education (AHE) is focused upon three important trends in relation to preparing an information economy workforce. While there is a significant growth of educational providers who offer updated information, adult higher education is providing leadership for knowledge engagement beyond information dissemination. The first key trend is its leadership in creating contextual authentic learning designs for workforce enhancement. Secondly, as AHE gains competence to be digital providers of education, it will continue to face the paradox of creating accessible and universal opportunities for adult learner participation. AHE is creating meaningful learning programs which draw upon information technology, while also innovating best practices for valid adult learning. Because knowledge is ephemeral and quickly dated, the last trend for AHE programs and related research in adult learning is focused towards developing critically reflective adult learners who can create and adapt knowledge for new understandings and practices in the knowledge economy.

*Keywords:* adult workers, adult higher education, advanced knowledge education, critically reflective practice, digital providers

### **Challenges to Adult Higher Education**

Current understandings of the knowledge economy have emerging from two defining forces: the rise in quality and intensity of *knowledge as a key commodity* for economic development, and the increasing *globalization through information technology* of both knowledge exchange and economic activities. The future of adult higher education is focused upon this knowledge-based economic growth and specifically of our role in the development and diffusion of new knowledge under the broad framework of lifelong learning. As suggested by the World Bank, “lifelong learning is education for the knowledge economy [The World Bank, 2003, p. xiii].

Through our work in developing lifelong learning systems, policies, and opportunities, we have become pivotal contributors to this new global environment. This new era of global economies in the information society has refocused and expanded our leadership role beyond our traditional understandings of ourselves as

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leaders of adult learning. Our task has now expanded to both prepare adults to be knowledge workers focused upon applying and synthesizing current knowledge, but to also become skilled creators and innovators of knowledge and products for our society. In essence, we are representatives of Janus, the Greek god with two faces – one facing the past and one facing the future. We continue to provide significant energy towards serving the basic adult learning needs of society – our traditional societal role. But, our new role is to be innovators to new futures focused upon advanced knowledge programming and instruction, of providing new tools and technologies for adult learners to become more of the creators and innovators in our global society.

In this paper, I will highlight three key trends in global adult higher education (AHE) in this new environment. Because of my USA context, some of the leading efforts, research, and understandings may be more reflective of the United States. Thus, I look forward to further discussions from your perspectives. These three key trends include: 1) Creative contextual authentic learning for initial and continuing workforce enhancement, 2) Digital support for access and universal participation of adult learners, and 3) Knowledge creation through critically reflective engagement – learning for continuous change. Because of cultural differences, I am defining adult higher education as formal and nonformal education offerings beyond traditional secondary education targeted to adult learners. These offerings often represent organizational and programmatic offerings with creative and innovative responses to the new knowledge economy, as well as responsive designs for the rapid evolution and diffusion of advanced knowledge. Key forms include short-cycle vocational/technical education; credit and noncredit tertiary certificates, college/university degrees, as well as programmatic offerings and partnerships with business and industry; and the growing focused upon post-college professional continuing education programs. Often these efforts are closely linked to information technology as a tool for access and sometimes as a tool for creative innovation. These forms are supported by adult educators in both private and public organizations, who are engaged in developing innovative workers and supporting families and communities who desire to maintain and sustain a viable quality of life and work contributions to the betterment of society.

### **Creative Contextual learning for Initial and continuing Workforce Enhancement**

Historically, adult education has been the key provider for workforce education to adults, with particular emphasis on the support of the undereducated, the disenfranchised, and often the dislocated worker. These needs continue and are



significant to all of our countries. However, there has been a growing concern for provision of advanced knowledge development and the pivotal role of educating this adult workforce for continuing knowledge advancement and innovative development and application. Because of the turbulent economic restructuring of work, of significant changes in individual work trajectories, as well as the rapid innovation and subsequent obsolescence of knowledge and skills, adults face ongoing demands to develop new and different knowledge and skill sets on a continuous basis. Many adults face angst from this turbulence and the harsh realities of an unstable and dynamic work economy. Many face difficulties in maintaining a job or in seeking new career opportunities. Nevertheless, the issues aren't just about access to jobs, it is about the changing work economy based upon required new knowledge and skills – unknown or expected a few years earlier. In these days of rapidly changing global knowledge, our role has become more than offering of initial and continuing workforce education. We also face adults who need to develop resilience and skills in support of their own self-development and sense of viability in this environment. Each of the trends in adult higher education represents this focus upon providing initial and continuing workforce enhancement, as well as supporting adult learners a co-partners in our work in adult higher education.

As we consider this new era, we note that the trend of providing advanced knowledge preparation has two perspectives. The first perspective of this challenge here has been the significant expansion of credit and noncredit tertiary providers and delivery formats in the last decade. For example, there are growing numbers of private tertiary institution education providers and related increasing enrollments in varied countries. For example, the World Bank reports the specific growth in Brazil (70% growth over a five year period), Côte d'Ivoire in West Africa (670% growth over a seven year period), as well as growth in private business schools and colleges in such countries as Poland, Czech Republic, and China (2003). It is not only the dramatic expansion of new tertiary providers; it is also the combination of new providers utilizing information technology, as well as other formats for access to learning programs by the adult workforce. An increasing number of tertiary institutions are offering part-time, evening, weekend, summer, and internet programs targeted to working adults. There are similar trends in tertiary providers in the USA. There has been significant growth in for-profit USA private providers, accounting for one-third of all US postsecondary institutions; these providers specifically target adult workers who desire easy access and rapid completion of credentials (often through internet offerings) [Kinser, 2009]. In the public sector, 2 year community colleges current serve 3 million adults in credit programs, with an additional 4 million adults in continuing education (noncredit) workforce

development offerings across a variety of alternative program and access options [Macomb Community College et al, 2009]. For some, it is surprising that continuing education has such high enrollments. Yet as noted by the World Bank, “in Finland the number of adults enrolled in continuing education programs at the tertiary level exceeds the number of young people enrolled in traditional degree courses” [2003, p. xxi]. This same noncredit explosion is occurring throughout many other USA adult higher education providers.

This expansion of providers, alternative formats, and course designs represents a blurring of credit and noncredit workforce offerings across the tertiary landscape and is more often based within countries who have or who are committed to future high engagement in the information economy [Kasworm, 2007]. Further, these significant information engagements are represented by countries with higher levels of education and who support and attract greater involvement of adults in postsecondary and continuing education activities. For example, Australia, Canada, United Kingdom, United States, Norway, Sweden, and Israel – each have 30% or more of adult students as part of their total tertiary enrollments [Kasworm, 1993]. Of equal importance is adult participation in job-related continuing education and training. “In the OECD, four countries – Denmark, Finland, Sweden and the United States – take the lead, with more than 35% of the population between 25 and 64 years of age having participated in some type of non-formal job-related continuing education and training over the previous 12 months” [Organization for Economic Co-operation and Development, 2007, p. 348]. A more unique statistic is the broader realm of adult learner participation. In 2004-2005, 52% of US adults participated in formal courses and training programs offered by a private business, company, hospital, or tertiary institution [O'Donnell, 2006]. Beyond these dramatic statistics on adult learner participation is the significant but often undocumented involvement of educated professionals who participate in additional education through many providers, including professional organizations, tertiary continuing education providers, private providers, and a number of self-managed learning groups. These adults who participate in professional continuing education represent varied professional qualifications and preparations and include such areas as medicine, engineering, education, business, technologies, as well as many other professional groups. From varied sources, it is speculated that between 70-80% of these professionals are engaged in continuing education each year, with many professional groups in the US and Canada mandating involvement in continuing education to maintain best practice.

However, this expansion of providers and delivery formats for supporting the adult workforce is only part of this new era facing the knowledge economy. Adult higher education is part of a key trend in offering innovative learning designs and

programs focused upon contextual, authentic learning – learning that provides adult connection and relevant action within the work context. Many leaders in adult higher education views their role as reframing instructional understandings towards contextual learning of adult workers, and not just a focus upon disseminating the changing knowledge base within their worksite. This understanding is also gaining prominence among many executive business leaders, as well as key researchers in adult learning [Webster-Wright, 2009]. For example, one recent CEO reported that over 80% of his current workforce is currently engaged in some form of retraining or new education effort [Bill Amelio, CEO of Lenovo, personal communication, February 5, 2007]. However, his dominant concern is that the future success of his company was based upon his workers’ engagement in contextual, authentic learning; course offerings that were not just didactic instruction in the classroom, but rather focused upon learning how to learn skills and learning through groups of learners in collaborative learning communities or knowing communities. He suggested that the most effective ongoing learning engagements for his workers were through learning in communities of practice, as suggested through the pioneering work of Lave and Wenger [Cohender, 2006; Wenger, 1998; Wenger, McDermontt, & Snyder, 2002].

There are a number of current innovative practices and research supports to create dynamic adult learning environments for “new knowledge in action contexts.” These dynamic contextual learning settings feature a variety of new designs focused upon interactive learning within the worksite, of utilizing varied experiential learning understandings for learner engagement, and of understanding learning as both an individual and a group endeavor [Jarvis, 2008; Kasworm, Rose, & Ross-Gordon, 2010]. In particular, these contextual authentic learning environments create learner understandings that incorporate engagement and learner adaptability to this rapidly changing knowledge environment. These designs focus not just upon the knowledge and skills integrated into a work setting, but they also focus upon creative knowledge problem-solving and upon engagement with the work and the knowledge through alternative and non-routine understandings. They are about creating knowledge through “communities of practice,” of action learning, and of creating networks and self-directed learning skills to build and adapt new knowledge on a continuous basis [Cranton, 1996; Fenwick, 2001; Hoare, 2006; Merriam, Caffarella, & Baumgartner, 2007; Webster-Wright, 2009; Wenger, et al., 2002].

Creative contextual learning is represented by a wide variety of adult education providers who offer a rich portfolio of educational resources of innovative instructional designs based in authentic learning experiences. These providers offer ease of access and delivery strategies that support contextual learning

opportunities, as well as alternative forms of assessment [Maehl, 2000]. At the heart of these designs is the focus on skills and action applications within their work context, of problem-based learning, of knowledge innovation. As a key example, many world-wide corporate training efforts now are refocusing upon knowledge management accountability, upon contextual learning (often in simulations, case studies, and other experiential engagements) and upon utilization of information technology for networking knowledge. These corporations not only provide training for their employees, but are often engaged in research and development to craft contextual learning designs to improve their company employee's innovation. It has been reported that global training efforts had expenditures of \$28 billion in 2002 [The World Bank, 2003] with current estimated expenditures reflecting over \$50 billion in 2009. These training expenditures often represent focused efforts in contextual learning, learning in action, and group or organizational joint learning efforts. In particular, business and industry adult education providers no longer believe it is sufficient to have a didactic classroom experience as the base for updating workers' abilities. Thus, experiential, active learning experiences and the use of information technology as an information supplement and social networked learning experiences provides important value that impacts one's work, one's sense of self efficacy, and one's key contributions to community and society.

### **Digital Age Providers: Paradox of Access and Universal Participation**

The second trend in adult higher education is new understandings for the management and for the design of programs as part of the digital age economy. As suggested by the World Bank, in 1990, it took six years to go from concept to production in the automobile industry. In today's environment, that process takes two years (The World Bank, 2003, p. 2). With this rapid innovation and change, what does it suggest for the education and continuing development of adult learners? Consider your current use of information technology as a support of your work, of your programs, of your instruction, and of your connections to adult learners. For example, I am astonished at the rapid use and innovation of social networking with Facebook, Twitter and others technology supports for learners, with over 60 million adults, or approximately 1/3rd of the population – in the US visit social networks in less than four years of availability [Ostrow, 2009, p. n.p.]. For example, in 1999, 92 percent of the larger US corporations were piloting Web-based training programs; today most of these US corporations are now engaged in both online and computer-based adult training and continuing education [Moore, 2010, January 10; The World Bank, 2003]. In 2004-2005, approximately one-third

(32 percent) of USA adults reported participation in adult educational activities with some form of distance education [O'Donnell, 2006]. A number of sources suggest that formal and informal online adult learning programs now includes 60% of US adults. Many of our communications regarding our educational offerings, as well as our involvements with adult learners, are now accessed predominantly through information technology, rather than personal interactions via phone or visits. For example, my North Carolina State University faculty is now experiencing more interaction with their prospective and current graduate students through e-mail, Facebook, and e-learning options, than through traditional office visits or phone calls. But, with this shift of interactions, our faculty has also developed understandings of the levels of communication and interaction in this process. We now speak to the quality of our interactions, how we present our work, our relationships, our “social presence” through these digital communications relationships. We are now more focused on the quality of personal interactions, rather than just dissemination of information. A key trend of becoming digital age provider represents many challenges at both a personal level of leadership and instruction, as well as our representation of programs, activities, and institutions. This digital age has offered new possibilities in the changing context, while challenging us to maintain our values and relational commitments to our work and to our learners. How can we make sense of our future through “24/7” (referring to 24 hours a day and 7 days a week) opportunities for connection and learning, for supporting our values of access and participation, while also providing quality learning and research supports to adult learners?

In considering the role of adult higher education as a digital provider, it is helpful to divide our adult workforce learners into two broad categories. One group of adult learners are those who lack technology skills and potentially other foundational knowledge and skills for the workforce. These individuals provide an important challenge for adult higher education to provide access and participation in relevant and meaningful learning for the work and for technology as a tool for communications and actions within the work context. These adult learners require a unique set of programs and learning opportunities that invite and support adults as they gain skills and confidence in technology, as well as in foundational knowledge and skills of the work economy. A number of innovative workforce programs are using on-site instruction, with supplemental information technology, which support new understandings for these learners and their confidence in seeking and using knowledge through digital media. Most of these programs have found the need to conduct initial assessment of knowledge and skills, because of the increasing diversity of learners in these programs. In one entry job training program in our city, the workers represented a range of ages, differing language capabilities, and

differing school backgrounds. Most of these individuals had experienced limited access to computers and the use of technology in their own personal lives. These individuals were often fearful of technology for their own work [Kasworm, et al., 2010]. These individuals often lack funding support and lack knowledge to access and participation in many of the workforce programs. Our role was vital for the development of these individuals in a knowledge economy. But, for these individuals and our work, their involvements in information technology has secondary focus to the important work of providing these individuals with basic foundational knowledge and skills to contribute to society.

Within adult higher education, we more often serve the second group of adult learners who are currently engaged in technology and view it as their primary access to both information and learning. These individuals often view themselves as “continuous learners,” seeking to upgrade their knowledge and skills for current job tasks or for new career options. They recognize that their currency in the job market requires continuous updating of knowledge and skills. For this second group, adult higher education faces a different challenge of access. With this group, AHE experiences the paradox of becoming more entrepreneurial, market-oriented, and revenue-focused. As suggested by Jarvis, “lifelong learning has become a process of consumption in the learning market we have to recognize the power of the consumers” [2007, p. 125]. Many of these individuals value education focused upon success in the marketplace and its direct application. Because information technology is part of their world, they also expect rapid response and rapid learning that fits within their needs and interests. For some, they also look to adult higher education as key societal advocates for this rapid learning approach. As noted by Jarvis, the learner as consumer has pushed many programs towards “just-in-time education” and a quick receipt of a credential. Thus, a number of these adult learners don’t understand our standards for participation and access. For many of us working with e-learning programs, naïve adults often require additional discussion about the differences of quality learning indicators in internet programs, of the needed learner commitment to spend individual time in study and engagement. Often these individuals lack self-management of time and effort when they are outside of a classroom setting and beyond an instructor’s voice and engagement. Thus, part of this trend for adult higher education is to become the expert in presenting understandings of quality learning outcomes in relation to access and participation in the digital learning environment. This expertise is important for communications with these adult learners regarding key expectations of learner responsibility, independent of the provider and instructor.

Beyond concerns for learner understandings of engagement in digital environments, the global market of tertiary education also has presented new

dimensions of ethical understandings and standards, beyond learner desires and expectations. Within the USA, there has been an ongoing battle with “diploma mills” (unaccredited tertiary institutions) targeted to adult learners. Some of these providers suggest relatively quick access to information and a subsequent credential, with limited quality learning experiences. More often, these unethical providers utilize internet programs and suggest quick time completion for a degree. However, many of these providers present inadequate learning designs and instructional engagement, with impoverished learning outcomes. They often use instructors who have limited understandings of adult learning theory, of active learning designs, and of valid assessments for learning outcomes. Thus, as AHE continues to support access and participation as digital providers, one of the greatest challenges is to design and advocate for quality learning environments to both learners and the community of tertiary providers.

Demonstrated quality learning outcomes, efficiency of access, and offering supports and social presence for digital adult learner has become a key landmark for success. AHE is creating new understandings of this culture of the digital education provider, of a culture of quality learning engagement through technology. This second trend represents innovative development of key standards for the provider and the learner, as well as interactive learning designs that make best use of technology as a tool for instruction and learning. Adult higher education has become a key advocate for quality digital learning in the adult workforce.

### **Knowledge Creation through Critically Reflective Engagement**

The third trend is embedded within the other previous discussions and represents a key understanding of our unique contribution to adult learners in this knowledge economy. The rhetoric of this knowledge economy historically was focused upon an educated workforce. However, now there is a changing focus towards research and development – of creating new knowledge that can generate new opportunities, new option, and greater efficiencies and effectiveness in the workforce. Underlying this focus is the unique contribution of adult higher education, which integrates contextual work knowledge with the development of critically reflective learners. This focus on critically reflective engagement is based in current theory and literature of adult learning theory, as well as new understandings of competencies for a global economy. As suggested by a number of current discussions on global workforce competencies, society requires adult workers who can act autonomously with a critically reflective stance, can use societal tools interactively in creative possibilities, and can participate in socially

heterogeneous, multicultural groups [Brookfield, 2000; Rychen & Salgarnik, 2001; Wilson & Hayes, 2000].

Although our adult clientele in adult higher education often seek specific expertise knowledge, the work of adult higher education is to provide adult learners with a richer and more in depth learning experiences based in the development of critically reflective understandings. We are responsible for updating the knowledge base of adult learners and their development of expertise, but we now face the more significant challenge of engaging their “influential tacit knowledge” towards new frames of understanding, of transforming their understandings of this new knowledge and its relevance to their actions in the world. These frames of new understanding are embedded in current adult learning models, representing critically reflective assessment and often reinvention of understandings and actions in the world [Brookfield, 2000].

If the future power of our global society is in knowledge creation, adult higher education is now challenged to create within adult learners knowledge and skills sets based in invention, critical thinking, and non-routine decision-making. Because past agrarian and manufacturing economies have relied on static knowledge models, adult higher education historically reflected that stable knowledge understandings and provided access for learners to the experts for that historic knowledge and understanding. But, this new era is not just about sharing expertise, it is about reinventing the learner’s understandings and frames of examination and action in society. It is now focused upon the learner as innovative expert, rather than just the recipient of expert sharing knowledge. Thus, adult higher education is now developing challenging educational venues that support learners who can view the world from new and different ways and who become partners in the creation and innovation of knowledge in the workplace.

Adult higher education is now pivotal to the knowledge economy, by developing adult learners with strong self-directed learning, with creativity and openness to change, and with critical reflective problem-solving. As suggested by the CEO of Lenovo, adult workers can no longer be adequate workers if they are only recipients of new knowledge. These workers need to be part of the creative force in developing new knowledge understandings and innovative applications and insights in their work and community. This new era suggests that the viability of work is based upon critically reflective application of knowledge and skill. Adult higher education has become pivotal to this new ways of viewing knowledge creation, knowledge management, and knowledge applications. Our work has become one of the key drivers to a healthy and vital economy and workforce.

In the last decade, there has been a growing interest in the USA, regarding individual and business trend setters who are creating new business and new



economic possibilities. Many communities in the USA are looking to this new phenomenon as an economic opportunity. They are closely considering how to attract and support “the creative class” of adults [Florida, 2002]. Communities are considering how they can create infrastructure that both attracts and retains individuals who are high profile creative learners and businesses based upon this creative synergy. Why be concerned about this new social phenomenon? These individuals and related companies are believed to provide over 30% of the new economic opportunities and to also attract related business and industry into regions of their operations. Not surprising to us, tertiary education and a rich portfolio of adult higher education providers has become important component in attracting their creative business entrepreneurs to a region. As noted by Florida, quality and diverse tertiary learning opportunities are significant for these individuals. Thus, adult higher education has become a key component of both attracting and creating knowledge environments that support creative individuals and their work. These individuals no longer are looking for banking education, of just the dissemination of information. These individuals are seeking regions with tertiary learning environments that are contextual and authentic, are supported with digital media, and have critically reflective, self-directed engagement.

As noted by Wurzburg of OECD, the growth of new knowledge and of lifelong learning is important, “because human capital matters for the economic and social fate of individual, enterprises, and countries” [Wurzburg, 2003]. Because foundational knowledge and skills have become a basic requirement of all citizens, adult higher education now is a significant force in creating advanced knowledge workers who are a fundamental asset to the growth of the knowledge economy. The focus of our future in adult higher education is upon learning in action and invention, of aiding learners to be self-directed and critically reflective workers in this new knowledge economy.

## **BIBLIOGRAPHY**

- Brookfield, S., 2000, “The concept of critically reflective practice”, in A. Wilson & E. Hayes (Eds.), *Handbook of adult education and continuing education (New Edition)*, Jossey Bass, San Francisco, pp. 33-50.
- Cohender, P., 2006, “Knowing communities in organizations”, in B. Kahin & D. Foray (Eds.), *Advancing knowledge and the knowledge economy*, MA: MIT Press, Cambridge.
- Cranton, P., 1996, *Professional development as transformative learning: New perspectives for teachers of adults*, Jossey Bass, San Francisco.
- Fenwick, T. (Ed.), 2001, *Sociocultural perspectives on learning through work*, Jossey Bass, San Francisco.

- Florida, R., 2002, *The rise of the creative class: and how it's transforming work, leisure, community and everyday life*, Basic Books, New York.
- Hoare, C. (Ed.), 2006, *Handbook of Adult Development and Learning*, Oxford University Press, London.
- Jarvis, P., 2007, *Globalisation, lifelong learning, and the learning society: Sociological perspectives. Volume 2 – Lifelong Learning and the Learning Society*, Routledge, London.
- Jarvis, P., 2008, *Democracy, lifelong learning, and the learning society: Active citizenship in a late modern age*, Routledge, New York.
- Kasworm, C., 1993, "Adult higher education from an international perspective", in *Higher Education*, 25, pp. 411-423.
- Kasworm, C., 2007, *Lifelong Learning – The Perspective of Higher Education Serving Adult Learners*. Paper presented at the World Conference on Lifelong Learning Chongwon, Korea.
- Kasworm, C., Rose, A., & Ross-Gordon, J. (Eds.), 2010, *Handbook of Adult and Continuing Education: 2010 Edition*, CA: Sage Thousand Oaks.
- Kinser, K., 2009, "Access in US higher education: What does the for-profit sector contribute?", in *PROPHE Working Papers*, (WP No. 14). Retrieved from <http://www.albany.edu/dept/eaps/prophe/publication/paper.html>.
- Macomb Community College, LaGuardia Community College, & Community College Research Center, 2009, Counting the Hidden Assets: First Steps in Assessing the Impact of Community College Noncredit Education Programs on the Workforce and Local Economies: Business Roundtable.
- Maehl, W., 2000, *Lifelong learning at its best: Innovative practices in adult credit programs*. Jossey-Bass, San Francisco.
- Merriam, S., Caffarella, R., & Baumgartner, L., 2007, *Learning in adulthood: A comprehensive guide (Third Edition)*, Jossey Bass, San Francisco.
- Moore, G., 2010, January 10, "Corporate training gets lesson from online education tech", in *MHT: The Journal of New England Technology*. Retrieved from <http://www.masshightech.com/stories/2010/01/04/weekly13-Corporate-training-gets-lesson-from-online-education-tech.html>
- O'Donnell, K., 2006, Adult Education Participation in 2004-2005 (NCES 2006-077). Retrieved February 15, 2008, from <http://nces.ed.gov/pubs2006/adulted/>
- Organization for Economic Co-operation and Development, 2007, *Education at a Glance: OECD Indicators*. OECD, Retrieved from <http://www.oecd.org/dataoecd/36/4/40701218.pdf>.
- Ostrow, A., 2009, March 15, Number of Social Networking Users Has Doubled Since 2007. Retrieved from <http://mashable.com/2009/07/28/social-networking-users-us/>
- Rychen, D., & Salgarnik, L. (Eds.), 2001, *Defining and selecting key competencies*, WA: Hogrefe and Huber, Kirkland.
- The World Bank, 2003, *Lifelong learning in the Global Knowledge Economy: Challenges for Developing countries*, The World Bank, Washington, D.C.
- Webster-Wright, A., 2009, "Reframing Professional Development Through Understanding Authentic Professional Learning", in *Review of Educational Research*, 79, pp. 702-739.

- Wenger, E., 1998, *Communities of practice : learning, meaning, and identity*, NY: Cambridge University Press, New York.
- Wenger, E., McDermontt, R., & Snyder, W. M., 2002, *Cultivating communities of practice: A guide to managing knowledge*, MA: Harvard Business School Press, Boston.
- Wilson, A., & Hayes, E. (Eds.), 2000, *Handbook of adult and continuing education*, Jossey-Bass, San Francisco.
- Wurzberg, G. (2003). Lifelong Learning – What Lessons from Experience in the OECD? *Lifelong Learning Workshop in Bratislava, December 9, 2003*. Retrieved July 6, 2007, from [http://www1.worldbank.org/education/lifelong\\_learning/presentations.asp](http://www1.worldbank.org/education/lifelong_learning/presentations.asp)



**REPLAY**  
**3D GAMING PLATFORM AND ITS USAGE IN PSYCHO-**  
**PEDAGOGICAL COUNSELLING IN SCHOOLS FOR**  
**INFLUENCING THE BEHAVIOUR OF YOUNGSTERS**

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*Abstract*

Nowadays, interactive gaming technology is highly popular amongst young people. By using this as advantage, the vision of REPLAY project is to use this technology as support in increasing the level of awareness of young people in motivating their behaviour, and encourage them to be highly responsible for the consequences of their decisions. The aim of REPLAY project, which involves experts in education, psychology and anti-social behaviour from Romania, United Kingdom and Spain, is to develop a gaming technology platform to provide a learning environment which will facilitate the reintegration in society of young people, who were marginalised by the society as a result of their anti social behaviour.

*Keywords:* anti-social behaviour, interactive gaming platform, primary and secondary users, REPLAY, intercultural adaptation of content, initial prototype game

**What is REPLAY?**

The target group of this project consists of young people aged between 10 and 14 years who tend to have anti-social behaviour in formal education environment. REPLAY is a support tool which will be installed and will become part of preventive anti-social behaviour programmes in schools as well as in day centres for youngsters involved in re-education programmes.

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### **Implementation and Management Approach**


The gaming platform, consisting of a videogame (software) and a wireless interactive balance board as a primary user interface, will be set in schools and run as a part of preventive anti-social behaviour programmes in schools. The platform will be installed as well in day centres for youngsters involved in re-education programmes and will be considered as support tool for professionals (i.e social workers). The teachers, social workers and professionals working in these programmes, manage the gaming platform in terms of content, gaming sessions, review of answers and selection of the educational activities included in the game sessions.

All centres using this instrument have been fully engaged in the game development, in testing and validation phases. All parts involved in these phases were initially trained in special sessions during which they got the required technical skills for using platform's components. These sessions have facilitated the efficiency of all processes during game's sessions. The testing phase had a series of steps specially designed for platform's evaluation from both practical/technical and pedagogical point of view. The first step in the testing phase aimed to assess the platform's functionality and content in order to assure the adaptation level for users aged 10-14 using this technological tool and also, for choosing the game content. The second step aimed to collect and analyze the feedback from testers in order to identify optimal solutions and avoid the bias effects during testing stage and its results. Platform's evaluation was made both by primary users (pupils aged 10-14 years) and secondary users (experts – teachers and university professors). Finally, the third's step aim was to complete an overview on the strengths, weaknesses and recommendations proposed by the testers from three countries (UK, Spain and Romania), which led to the development of a new version of the game, version which was tested later. Therefore, we can say that pre-testing the initial prototype facilitated its development in the testing phase. At this stage of the project, instrument's validation and relevant recommendations were very important in drawing up the game and developing the platform.

There are a number of interrelated success factors which will influence the project result. In the first place, the key challenge is to ensure that consistent testing and validation is carried out in the three end user testing centres. For this, a robust methodology has been developed and communicated to all participants. Secondly, the technology solution presents the possibility for many problems in terms of effective running of the game in each centre. When any of the main component technologies fail, the testing and validation suffer. Thus, to prevent this negative

aspect, significant pre-testing sessions have been run within each testing centre and open communication channels have been set up between testing practitioners on one hand, and game developers on the other hand. It is crucial for the final result of the project, to obtain usable and meaningful data from testing and validation, data which will be implemented into the next version of the game prior the final installation of the game in schools or psycho-pedagogical counselling centres.

The game has two phases. During the first phase – **Play** – the game motivates youngsters with the success they get by completing interactive and 3D designed levels of the game. The races in the game contain subliminal educational messages. Players’ reactions and decisions during **Play** phase offer the opportunity for teachers and counsellors to choose pedagogical strategies for their interventions on the target group of the project (Table 1).

<b>TOOLS AND TECHNIQUES</b>		
	<b>CHILDREN</b>	<b>EXPERTS / TEACHERS / COORDINATORS</b>
<b>Phase 0:</b> Pre-session	<ul style="list-style-type: none"> <li>• <b>ASB</b> – Allsop and Feldman’s scale of anti-social behaviour in the adaptation by Martorell and Silva [1993]</li> <li>• <b>CE</b> – Empathy evaluation questionnaire by Mehrabian and Epstein [1972]</li> <li>• <b>IVE-J</b> – Impulsiveness, adventure-seeking and empathy scale by Eysenck, Easting and Pearson [1984], adapted by Martorell and Silva [1993]</li> </ul>	<ul style="list-style-type: none"> <li>• Training session</li> <li>• <b>CBCL</b> – Achenbach, T. M’s Child Behaviour Check List, [1991].</li> </ul>
<b>Phase 1:</b> Play Session	<ul style="list-style-type: none"> <li>• Cognitive walkthrough</li> <li>• Breakdown analysis with video-analysis</li> </ul>	<ul style="list-style-type: none"> <li>• Heuristic evaluation check list</li> <li>• Cognitive walkthrough</li> </ul>
<b>Phase 2:</b> “Re-play” Session		<ul style="list-style-type: none"> <li>• “Re-play” observation guide</li> </ul>

<b>Phase 3:</b> Post-session	• Motivation questionnaire, Flow/Likert scales	• Motivation questionnaire, Flow/Likert scales
		• Questionnaire on Evaluation of the tool's professional performance value
• Focus Group Guide		

Table 1. *Assessment instruments used in Replay project*

A very important aspect in users' behaviour assessment is the way they complete the Play Session levels on one hand and the Replay Session on the other hand (the psycho-pedagogical reflection on choices made during the game). These sessions highlight the coherence between users' sequential behaviour. While in Play session the main objective is to complete the six levels and control the balance board, in Replay session the user is in the situation of reflecting on the content's utility in various contexts. Thus, we can assume that Replay session facilitates personal and social skills' development, skills which related to the benefices they imply in users' adaptation process, could be considered part of a particular domain: cross-curricular skills.

The users were asked to complete all game's levels so they were able to make a record of their progress both individually and assisted by the educational counsellor/psychologist. The framework created by the game led to a decrease of the resistance associated to technology handling and facilitated the chance of building a psychological relationship based on reflections, a transformation of the individual emotional frameworks, choices' adjustment to daily life and reconsideration on users' reactions within an outside created environment. This environment allowed primary users (pupils) to adapt and understand their internal registers.

In this research we used both quantitative and qualitative analysis in order to get a complete picture of the situation we studied. Based on experts' and initial users' opinion offered during the first phase of this project (WP1 and WP2), the sample for our research consist of children aged 10-14 years both genders and low anti-social behaviour. This sample was constituted after a several number of pupils completed a questionnaire designed to identify the level of anti-social behaviour (ASB). Finally 120 pupils with low level of ASB – 40 from each participating country – were selected. Moreover, these participants called “primary users” were selected based three more criteria: age (two groups of pupils aged 10-12 years and aged 12-14 years), gender (boys and girls) and finally their level of education (primary level / secondary level) (Table 2). In Romania, there were selected 40 primary users from five different educational institutions located in Iasi – “National



College”, “Vasile Alecsandri” Highschool, “Vasile Conta” School, “Bogdan Petriceicu Hasdeu” School and “Nicolae Iorga” School.


	PRIMARY USERS				TOTAL
	BOYS		GIRLS		
	10-12years	12-14 years	10-12 years	12-14 years	
Primary school	30	-	30	-	60
Secondary School	-	30	-	30	60
<b>TOTAL</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>120</b>

Table 2. Sample distribution – Primary users


	SECONDARY USERS		TOTAL
	EXPERTS	TEACHERS	
	Psychologists, Occupational Therapists, Social Workers	Teachers who teach in primary and secondary schools	
<b>TOTAL</b>	<b>18</b>	<b>18</b>	<b>36</b>

Table 3. Sample distribution – Secondary users

### Technological solution

The Replay project aims to use the popularity and the interest that video gaming has, as advantage in creating a tool which will help experts to understand youngsters’ anti-social behaviour. A 3D environment and an interactive game were developed to introduce the user in a race against the clock through a futuristic world. By integrating in a pedagogical framework interspersed “play elements” and a series of specific activities, each user’s decisions and values were highlighted during the game. Each activity within a level had to be completed before the user could continue the next level.

Once completed this highly playable game and all its embedded activities, the application moves to the main menu of the game which allows the expert to discuss the specific responses given by the player during each activity and creates the opportunity for an open and honest dialogue about values and behaviours. This dialogue has shown users’ opening in sharing the learning experiences they had in other environments than school. Therefore, we can assume that Play-Replay

sessions represent modes to access the internal frame of the user who is in the position to offer a new vision of his/her reality and to reflect on the choices made during the game and to facilitate cognitive transfers from game's situations to real life situations.

During play sessions, the psychologists recorded users' behaviour by referring to specific dimensions: achieving game's task without diminishing its playful nature, user's focus on the task, provocative nature of the game which facilitates skills development, user's control over actions and choices, understanding the game's objectives, immediate and understandable feedback, how involved is the user during his progress in game's levels and when concern regarding the time disappears. All these dimensions give methodological consistency to this game and offer a permanent report on the impact Replay has to the user.

### **Main Technologies developed and integrated**

The technologies developed and integrated in the REPLAY Gaming Platform are:

- 3D Video Game integrating multimedia content/activities related to anti-social behaviour;
- Interactive and wireless balance board for game control;
- A range of interactive systems for playing sessions (wireless board, PAD, Joystick, keyboard);
- A user recognition system designed to improve the way user interacts with the system and to increase the level of implication.

### **Impact, innovation and results**

The primary stakeholders of the REPLAY project (beyond the project partners) are the end users. As the project is currently in the middle of the testing phase, the impact on these end users will not be fully known until all results from this process have been collated and analysed. However, we do have some early indicators on how the project may have an impact on the work of teachers and professionals working with marginalised young people and, as a consequence, what the impact may be on those youngsters.

First of all, the findings suggest that Replay will become a valuable part of the programmes preventing anti-social behaviour; there are very few similar products on the market. Furthermore, the financial costs of developing highly immersive video games are minor when compared to the ones for the development of this sort of niche games. By focussing on anti-social behaviour and creating a genuinely playable, immersive game, Replay has the potential to bring significant value to all

professionals working with marginalised young people from all over the world. The potential of the technology to let young people express themselves and to create a genuinely “youth friendly” context which in normal situation is difficult, is already proven. By creating this environment and by providing the appropriate follow-up tools, young people at risk of being marginalised due to their behaviour, can be helped onto a more positive path. Children’s involvement has already been proved by their gaming experience. Replay is offering an educational framework which can build premises for psychological counselling. The risk of becoming addictive to this game is very low because play session (the user runs through six work activities using the platform) is only an anchor in developing a Replay session which depends very much on psychologist’s skills. Therefore, we can say that Replay is a challenge for any type of user (student or expert / professional).

This challenge is primarily determined by the opportunity Replay has in diversifying the range of game devices, which allows user’s immersion observable (especially for boys between 10-12 years). Following some conducted tests a development of reflective capacity of users was clearly noticed. This allowed an analysis of driving behaviour in relation to the specific type of temper reactions. User’s choice regarding the route, the chosen speed during the game were indicators for experts in the process of measuring time during which youngsters made their moral choices. Meanwhile the user had to reflect on his emotional reactions caused by failure or success. User’s manner in completing game’s activities facilitated the process of forming a perception of the real reasons which can determine the success. Also, this aspect helped him to elaborate real allocations to the success and the failure.

For project partners, the technology creates a number of positive opportunities for further development and also for commercialisation. The gaming platform itself has been built in a modular way to facilitate easy replacement of content and activities. This means that many different versions of the game can be developed cheaply and quickly therefore opening up a huge range of market opportunities beyond the behavioural sector (some of which are already being explored). There are many other application areas that can be explored including games for autistic children, language-learning games, soft-skills games and so on. In addition, the project has also created a wireless component – “human joystick” – which increases the immersion of the player in the game by adding a physical element to the game play. This component can also be used in conjunction with other games on other platforms and therefore represents a further benefit to the project partners.

By using the platform, we can say that an opportunity is created in order to harmonize the body with the mind, since it determines the development of specific skills: the ability to easily see failures in the use of game devices, the ability to put

body movements in the form of mental schemes, the ability to control fine movements of the body, the ability to recognize physiological and psychological reactions caused by the use of the game, the ability to make comparisons and to measure progress, moves coordination ability, ability to predict images related to success and determine performing behaviour, ability to interact and to accept adult's presence during learning process, physical ability to transfer physical acquisitions from game environment to social and school environment.

Replay Project is the first experiment using a game as a preventive tool in a program which aims to combat anti-social behaviour in schools but also in the re-education programmes. It could be a reference for other initiatives related to the use of video games to support prevention programs and treatments for youngsters which are likely to be marginalized.

Even if in the last years the market for so-called "serious games" has grown rapidly, there are many aspects to analyse on what contributes in designing a successful educational game.

The dynamic between the game and the embedded pedagogical content is critical for success of a game like Replay. Furthermore, the game itself needs to be designed at a level which makes the player think and feel that it is both, hard enough to be a challenge and easy enough to complete. In addition, a game like Replay will not be played continuously or for long periods of time by the player, it is designed to be played in collaboration with a teacher or expert as part of a wider programme. This makes it fundamentally different (as a game) from the sorts of games that young people are used to play and which are based, predominantly, on the assumption that the player will have many hours if not days to master the different levels of the game.

## Conclusions

*What type of tool is Replay - an assessment or a treatment one?*

- It is a tool that will help professionals to understand and adequately address youngsters with anti-social behaviour;
- Can be used as a starting point for discussions between the player and a professional (psychologist, counsellor or teacher), leading to therapeutic results;
- It is an assessment tool since it allows understanding the motivations and feelings of people involved in a game context. This background could be significantly more effective in causing open and frank responses to questions and dilemmas presented. In addition, this approach does not restrict the use of the game as a starting point for a therapeutic purpose.

*Who is playing it?*

The target group of this project consists of young people aged between 10 and 14 years who tend to have anti-social behaviour in formal education environment.

Motivation for choosing this group:

- Most effective way to link with anti-social behaviour is to address problems as early as possible;
- While child's age increases, the expression of anti-social behaviour becomes more serious and the effectiveness of interventions becomes less secure;
- Number of young people who have different types of anti-social behaviour is much lower than those who have serious forms of ASB;
- Young people aged 10-14 pass through a significant period of personal transition – puberty, changing different levels of the school, etc.
- Anti-social behaviour is more common among boys than among girls. However, Replay will be developed so that it can be applied to subjects of both sexes.

*What is the motivation for selecting certain ASB behaviours by REPLAY?*

- There is no scale that presents these behaviours gradually, which starts with low-level events and ends, eventually, to criminal events;
- Low-level event is repeatedly described as an “early indicator” of the occurrence of more serious problems which will may appear later in adolescence and adulthood;
- Low-level expression of ASB is very common in schools and communities and represents most of the incidents of anti-social behaviour. Therefore, using prevention is better (and even cheaper) than making therapy to solve this kind of difficulties.

*What kind of exercises and activities (content) have been included?*

- Those who have the opportunity to be carried out in multimedia format in order to take advantage of 3D multimedia applications;
- Those that ensure compatibility between the 3D game and the specific activities of educational intervention (video and audio files).

Currently, Replay videogame prototype is already developed and distributed to all partner countries. In the WP3 phase, Replay has been tested on three samples of children and teachers based on a complex and unique methodology in the three partner countries.

## **BIBLIOGRAFY**

Ainge, D., 1995, “Virtual reality in Australia”, in *VR in the Schools*, Retrieved from <http://eastnet.educ.ecu.edu/vr/vr1n1a.txt>.

- Alborzi, H. et al., 2000, "Designing StoryRooms: Interactive Storytelling spaces for children", in *DIS2000*, pp. 17-19.
- Andrews et al., 2004, "Cosmus: Virtual 3D Cosmology in Public Science Museums", in *Virtual Reality for Public Consumption, IEEE Virtual Reality 2004*, Workshop Proceedings.
- Beentjes, Johannes W. J. et al., 2001, "Children's Use of Different Media: For How Long and Why?", in *Children and their Changing Media Environment*.
- Billinghurst, M., Kato, H., Poupyrev, I., 2001, *The Magic Book: A transitional AR interface*, *Computers & Graphics*, pp. 745-753.
- Cox, L., 1997, March, "Introduction to Virtual Through Music", in *VR in the Schools*, Retrieved from: <http://www.coe.edu/vr/vrits/2-4cox.htm>.
- Crețu, C., 1997, *Psihopedagogia succesului*, Editura Polirom, Iași.
- Crețu, C., 2008, "Talent and Success", chapter in T. Balchin (Ed.), *International Handbook: Beyond Gifted & Talented - Towards a conceptualization fit for the 21st century*, Routledge International
- Cromby, J., Standen, P., Brown, D., 1995, "Using Virtual Environments in Special Education", in *VR in the Schools 1*(3), pp.1-4.
- Ferreol, G., Neculau, A., 2003, *Violența. Aspecte psihosociale*, Editura Polirom, Iași.
- Fjeld, M., Voegtli, B.M., 2002, "Augmented Chemistry: An interactive educational workbench", in *IEEE and ACM International Symposium on Mixed and Augmented Reality (ISMAR'02)*, pp. 259-260.
- Foreman, N., Wilson, P., Stanton, D., 1997, "VR and Spatial Awareness in Disabled Children", in *Communications of the ACM 40*(8), pp. 76-77.
- Gislen, Y., Harvard, A., 2000, *The video sandbox – designing and amplified playspace for children*.
- Greenfield, P. et al., 2001, "The Impact of Computer Use on Children's and Adolescent's Development", in *Applied Developmental Psychology*, p.22.
- Johnson, A., Moher, T., Ohlsson, S., Gillingham, M., 1999, "The Round Earth Project: Collaborative VR for Conceptual Learning", *IEEE Computer Graphics and Applications 19*(6), pp. 60-69.
- Kaufmann, H., Construct 3D, 2002, "An Augmented Reality Application for Mathematics and Geometry Education", *Video Description in Proceedings of ACM Multimedia Conference*.
- Ibañez, F., 2010, February, "Replay Project: a gaming platform for social reintegration", Retrieved from: <http://www.epractice.eu/en/cases/replay>
- MANTE, 1996, "Manchester Telematics Explained", Retrieved from: <http://www.poptel.org.uk/mante/glossary/g174.htm>.
- McComas, J., Pivik, J., Laflamme, M., 1998, "Current Uses of Virtual Reality for Children with Disabilities", *National Center for Biotechnology Information (NCBI)*, Retrieved from: [http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list\\_uids=10350916&dopt=Abstract](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=10350916&dopt=Abstract).
- Neamțu, C., 2003, *Devianța școlară*, Editura Polirom, Iași

- Pantelidis, V., 1995, June, "Reasons to use virtual reality in education", *VR in the Schools*, Online : <http://eastnet.educ.ecu.edu/vr/vr1n1a.txt>.
- Roussos, M., Johnson, A., Moher, T., Leigh, J., Vasilakis, C., Barnes, C., 1999, "Learning and Building Together in a Immersive Virtual World", *PRESENCE* 8(3), MIT Press, pp. 247-263.
- Ryokai, K., Cassell, J., StoryMat, 1999, "A playspace for collaborative storytelling", *ACM SIGCHI Conference on Human Factors in Computing Systems (CHI99)*, pp. 272-273.
- Strickland, D. & all, 1996, "Brief Report: Two case studies using Virtual Reality as a Learning Tool for Autistic Children", *Journal of Autism and Development Disabilities* 26, pp.651-659.
- Turluc, M.N., Karner-Huțuleac, A., Dănilă, O., 2009, *Violența în familie: teorii, particularități și intervenții specifice*, Editura Universității "Alexandru Ioan Cuza", Iași.
- Wilson, P., Foreman, N., Tlauka, M., 1996, "Transfer of Spatial Information from a Virtual to a Real Environment in Physically Disabled Children", in *Disability and Rehabilitation* 18(12), pp. 633-637.
- Winn, W., 1993, Slater, M., Wilbur, S., 1997, "A Framework for Immersive Virtual Environments (FIVE): Speculations on the Role of Presence in Virtual Environments", *PRESENCE* 6(6), MIT Press, pp. 603-616.





## IN-CLASS AND LAPROF: EUROPEAN PROJECTS SERVING BUSINESSES AND LABOUR MARKET

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### *Abstract*

This article aims to present the how educational resources and products elaborated by European projects can be efficiently employed to support the development of SMEs and labour market, especially in connection to language learning and intercultural communication, in the context of the present European economic shifting background. The article focuses on two European projects: LaProf (Key Activity 2: Languages) and In-CLASS (Leonardo da Vinci – Transfer of Innovation), both focused on language learning and intercultural communication instruments, resources and auditing schemes meant to improve international communication competences and professional development of employees and thus support company progress.

The first set of products aimed at supporting company (SMEs) progress is elaborated by In-CLASS: Intercultural Communication and Language Assessment project<sup>3</sup>. The aim of *In-CLASS* is to enhance the competitiveness of international SMEs within the partner countries by assisting them to identify language and culture barriers which arise from cross-border trade, and/or the development of a multilingual workforce, and to find specific costed solutions to address communication difficulties by the provision of an effective communication audit scheme for SMEs.

The second set of educational products is elaborated by *LaProf*: Language Learning for Professionals in ICT and Agriculture project<sup>4</sup>. The aim of *LaProf* is to equip its target public with a series of tools for learning general and specific vocabulary and for acquiring cultural and social information much needed when going to work abroad. The intended users are ICT teachers living in Estonia (and the Baltic region in general) who want to relocate and work in Finland, and agricultural professionals living in Romania who want to move and work in Greece. At the same time, the project addresses the training institutions and decision makers in this field; providing them with working tools, such as online language courses; the main idea is how to tie up language learning and cultural acclimatization into the training and immigration processes.

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The aim of this article is to share some insights into the experience EuroEd Foundation currently has with the implementation of two European projects: one Leonardo da Vinci – Transfer of Innovation project whose products and outcomes aim to meet the linguistic and intercultural communication needs of SMEs active in the area of import – export, and one Key Activity 2 (Languages) project aimed at promoting language awareness to immigrating workforces in two particular sectors: ICT and agriculture (by providing access to language learning resources that will help candidate immigrants get more familiarized with the terminology and cultural issues in their sectors).

The projects are titled *In-CLASS*: Intercultural Communication and Language Assessment and *LaProf*: Language Learning for Professionals in ICT and Agriculture and are co-financed by the European Union.

### **Background and rationale**

Research commissioned by the European Union shows that in today's Europe, languages at the workplace and international and intercultural communication play an increasingly important role due to the globalisation of businesses not only at the level of multinational corporations but also at the level of small and medium-sized enterprises (SMEs). EuroEd Foundation was directly involved in one such study, called ELAN - Effects on the European Economy of Shortages of Foreign Language Skills in Enterprise<sup>5</sup>, and collected information from about 100 Romanian SMEs working in exporting goods or services. The data specifically points to the fact that 11% of the respondents admitted to having lost at least one contract due to lack of appropriate linguistic competences. As far as the importance of intercultural skills is concerned, more than 10% of the respondents were aware of having encountered intercultural difficulties. The level of linguistic skills is important for individual employees as well, not only for the company. According to the ELAN study, the language competences raise the professional profile of the staff, as 73% of the participating SMEs have a policy for recruiting language-skilled staff and 57% keep track of their employees' language skills. This fact seems even more evident in large multinational companies of which 94% practice "selective recruitment" (staff with linguistic skills).

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<sup>5</sup> [http://ec.europa.eu/education/policies/lang/key/studies\\_en.html](http://ec.europa.eu/education/policies/lang/key/studies_en.html)

The assistance provided by the *In-CLASS* project by the implementation of language audits to enable SMEs to improve their competitiveness will enable more to survive and expand through export and, in so doing, retain higher levels of employment. Furthermore this will create new job opportunities by introducing new employment categories through the consultants and scheme managers.

As far as the *LaProf* project is concerned, the partnership found through meetings/discussions and by experiences from previous projects that there is a strong need for further language learning initiatives that will enable immigrating workers to learn the language and terminology that is required for them in order to professionally function and adapt in the country they are moving to. This is a reality already prominent in two example user groups: Estonian ICT teachers that move and work in Finland, and Romanian workers who move and work in Greece. These two user groups have been chosen as the targeted ones for *LaProf*, since they belong to two characteristic sectors (ICT and agriculture) that can be considered rather knowledge intensive. A good knowledge of professional terminology in the native language will help their cultural integration in the countries of destination.

### **Aims and objectives of the projects**

The aims of *In-CLASS* project are to enhance the competitiveness of international SMEs within the partner countries by assisting them to identify language and culture barriers which arise from cross-border trade, and/or the development of a multilingual workforce, and to find specific costed solutions to address communication difficulties by the provision of an effective communication audit scheme for SMEs.

The project objectives are to pilot a European communication audit and auditor training scheme, to develop full sets of Communication auditor training materials, in the project partner languages, to implement the new training materials, revised audit framework and a model training scheme (following a common European code of practice; quality assurance procedures; guidelines; terms of reference) for the training of consultants and language auditors to undertake 'Language and Communication Audits' (LCAs) in SMEs with the objective of improving companies' competitiveness and entrepreneurship in other markets; to pilot audit schemes for SMEs in the partner countries, to implement a training programme with an e-learning component for language auditors in the partner countries and in their languages (including English), to develop practical materials adapted for each country's particular environment for the Auditor training workshops, to identify sponsors and/or a self-financing system and to promote the Language Audit concept through the scheme, to establish a website for the exchange of information

in the partner languages, to select and train language auditors across the countries participating in the project and to pilot European language audits in 20 SMEs across each country.

The overall aim of LaProf is to develop, publish online, and provide free access to language learning exercises that will help the immigrating workforce of two particular sectors (ICT education and agriculture) to get more familiarized with the terminology used in their destination countries for their sectors. This will be achieved through developing and disseminating a number of language learning exercises through an online environment called the *LaProf Web portal*. In this way, LaProf aims at encouraging innovation in the development of effective and high quality language learning and teaching tools for the particular sectors of teacher and vocational education. In addition, it aims to provide a wider variety of language teaching materials for the targeted user groups of LaProf, by especially focusing on language exercises for both widely spoken EU languages (such as English and French) as well as under-represented languages (such as Greek, Finnish, Hungarian, Romanian, and Russian).

More specifically, LaProf has the following objectives: to study the language competencies and learning needs of the two targeted user groups: IT teachers from Baltic countries (mainly Estonia, but also Lithuania and Latvia) that want to work in a Nordic country (with a focus on Finland), and agricultural professionals from Eastern European countries (e.g. Romania and Hungary) that want to work in a Mediterranean country (with a focus on Greece); to study the requirements of the Common European Framework for Languages (CEFL) of the Council of Europe, in order to design a language learning framework that will set up the basic guidelines and directions about how/what the targeted users should learn about the vocational training program for the candidate advisors, adopting a blended learning approach; to design and implement a number of LaProf language learning exercises that will help targeted users learn the terminology of their sectors in both the languages of the destination countries (i.e. Finland and Greece) as well as in two widely spoken EU languages (i.e. English and French); to develop a pedagogic strategy to embed the solutions in the immigration preparation process and embedding the acquisition of cultural competencies in the language learning process; to evaluate the LaProf language learning approach through a number of carefully designed evaluation activities, that will involve sample groups of actual learners; to promote the LaProf language learning material and methods to relevant communities, as well as formulate a set of policy recommendations to language teachers, professional associations and decision makers that deal with both language learning, teachers' education, as well as vocational education and training around Europe.

### **Target groups**

The products and outcomes of the *In-CLASS* project address small and medium sized businesses (SMEs) exporting to other countries, primarily within Europe, SME advisers, consultants, export counselors, managers of SMEs and language service providers; ministries of trade/foreign affairs, or chambers, and other providers of LCAs setting up or running audit schemes, workers currently working in SMEs who wish to become more mobile with access to language training and country information.

The *LaProf* project addresses young (and possibly unemployed) teachers of ICT and technology topics from the Baltic countries, who wish to work in Finland and young agricultural professionals (either students in agricultural universities or recent, unemployed graduates) from Romania, who wish to work in Greece.

### **Products and outcomes**

Language skills needs will increase in future across the whole of Europe. In 13 of the 29 countries in ELAN surveyed, at least 50% of respondents believed they would need additional language skills in the next three years. Smaller SME's in particular lack the resource to make forward investment in language skills and may therefore be a legitimate and necessary target for intervention measures such as a Language Audit scheme on a European scale. They forecast an increase in their demand for language skills (both qualitative and quantitative) to service this expansion and will be looking to education and training systems and to labour mobility to provide these skills rather than engaging in training themselves. The Language and Communication Audit scheme addresses this.

English is important as the world business language, but other languages are used extensively as intermediary languages and businesses are aware of the need for a range of other languages in relationship-building. An extended Audit Scheme across these three (Romania, Italy and Hungary) countries develops a greater capacity in the Audit network to address new areas of trade and offers specialist awareness. Nearly half of exporting SME's in Europe are planning to expand into new foreign markets in the next three years. *In-CLASS* offers a supra-national solution to address this growth.

The Language and Communication Audit focuses on introducing the four elements of language management which were found to be associated with successful export performance at European level: having a language strategy, appointing native speakers, recruiting staff with language skills and using translators/interpreters. All these elements are addressed through the Language

Audit scheme. An SME investing in these four elements as a result of deficits identified in an audit is calculated to achieve an export sales proportion 44.5% higher than one without these investments (ELAN Report, 2006). Furthermore, it is likely that there would be productivity gains from exporting which would wash back to the internal economy. Total Factor Productivity for exporters can be as much as 3.7% higher than the industry mean. A 3.7% productivity spillover from exporting could imply a very substantial additional impact from these investments in language skills.

Apart from the Language And Communication Audit Schemes tailored to meet the national specific requirements and contexts of each project country, the *In-CLASS* project will also train and create a pool of 30 consultants and auditors, will carry out LCA audits in 60 SMEs and will produce national reports on the state of art of the SMEs' language and international communication strategies and approaches.

The LaProf project proposes a different methodological approach, centred on individual users rather than institutions (SMEs), with a special focus on areas as ICT and agriculture. The main results of *LaProf* project are expected to be the following:

- a. a language learning framework defining how candidate learners can be familiarized with the terminology and culture of their sectors in their destination countries, based on a series of carefully designed language learning exercises. This contains a pedagogic strategy to embed language learning in the immigration preparation process;
- b. an online environment (the LaProf Web portal) through which interested users will be able to easily search, identify, retrieve and use language learning exercises in a digital format. It will be developed according to relevant international standards of the learning technology domain;
- c. an online tool through which all producers of digital resources on language learning for the targeted communities will be able to upload their resources, describe them with appropriate metadata in English and in their languages, and to make them publicly available via the LaProf Web portal for all interested users to find ([www.laprof.eu](http://www.laprof.eu));
- d. at least 20 learning exercises that will be translated into five EU languages (i.e. English, French, Romanian, Hungarian, Estonian) and in Russian, which will be made accessible online through the LaProf Web portal. All resources will be described and categorised with rich metadata describing their properties and characteristics (e.g. to which professions, regions or linguistic audiences they apply);

- e. a series of evaluation events (at least one for the learners of each participating region/ country), during which the developed language exercises will be used and assessed;
- f. a focused dissemination event (European Workshop) that will aim to bring together LaProf with other relevant initiatives, in order to exchange experiences and discuss their results;
- g. finally, a network of interested people and/or institutions (such as language teachers, language institutes, professional associations, educational initiatives) will be formulated through an appropriately designed Partner Affiliation Program, in order to create a structure that will further sustain and use the project results.

The main products the project offers to potential users are online learning platforms that include language courses and language learning exercises whose content focuses on the needs of office staff and students or pupils studying economics, business administration or accounting and also ICT teachers living in Estonia (and the Baltic countries in general) who want to move and work in Finland, and agricultural professionals living in Romania who want to move and work in Greece. To further meet these needs, the ELSTI project has also developed *business culture modules* finely tuned to the national business environments of ten European countries and *a personal development module* aimed at motivating learners to optimise their linguistic and professional achievements.

Significant attention is given to encouraging the learning of European official languages (such as English, French, Finnish, or Greek) as foreign languages in order to help European citizens from Estonia and Romania to understand better the working environment and culture of the targeted countries (i.e. Finland and Greece), which have languages that are notably less widely used and taught. Both awareness raising activities, and development and dissemination of language learning materials will be taking place. To reinforce the acquisition of language and cultural competencies by its targeted user groups, as well as to raise awareness for the targeted languages, *LaProf* will develop and promote language learning methodologies and resources that are aimed at motivating the particular categories of language learners, in order to enhance their capacity for language learning.

### **Conclusions**

The *In-CLASS* project will pilot a European communication audit and auditor training scheme based on models developed in previous similar projects and will also develop full sets of Communication auditor training materials. In addition, will also implement the new training materials, revised audit framework and a model

training scheme (following a common European code of practice; quality assurance procedures; guidelines; terms of reference) for the training of consultants and language auditors to undertake 'Language and Communication Audits' (LCAs) in SMEs with the objective of improving companies' competitiveness and entrepreneurship in other markets.

This multi-fold and innovative approach will have a positive impact on the targeted beneficiaries (both institutions and individuals). Consequently, the partnership strongly believes that the structured approach of the professional training (as explained in detail above) will pave the way for the inclusion of the training materials, revised audit framework and a model training scheme in the Romanian national VET system.

Building on the expertise already accumulated in previous similar initiatives, the expected impact is located to Business Service Systems and work-based VET systems in both Romania and Italy and supported by the Chambers of Commerce and Industry. Via networks of new consultants and advisors new trade links will be developed thus indirectly increasing demand for audits and the extension of the scheme.

Since 2002 Italy has an action plan created in cooperation with CEDEFOP focusing on research and innovation and with the aim of restructuring and reforming the Italian VET system in place. This includes the development of the adult education system with special attention to innovation. Development of the system also particularly emphasises alternance training in VET. In-CLASS addresses these needs and changes through the implementation of the LCA scheme and aids to reform the Italian system by introducing a new type of workforce.

Many small and medium sized companies in Italy face serious communication problems when doing business with other countries. Communication channels are restricted to e-mail and verbal communication. Most of the entrepreneurs know that incorrect communication may ruin their business relation but they don't have any tool to find their weaknesses and opportunities to improve. Training consultants and working out training materials for these target groups will improve their business opportunities and competitiveness abroad. These measures will ensure the provision of high quality VET in concordance with the social demands of the 21st century (the aims of CEDEFOP).

The main approach in *LaProf* project is to develop open and accessible content that is shared in a community of practice, which means that users are involved in the creation and use of the content. The community of stakeholders (especially employers) will be involved in the project continuously and it will be a dynamic environment that will - after the initiation phase – be self-sustaining. One focus can be the use of the concept of “user generated content”, as stakeholders will be



enabled to further develop and maintain existing resources. Based on this approach, a refined sustainability model will be worked out during the project, as *LaProf* is designed so as not to need many resources, with an emphasis on networking and target group learning and working together. Also, cooperation with language learning institutions is foreseen by the project developers by means of a tutorial and training material on how to create and use exercises and learning events (as language learning schools can create exercises in *LaProf* under their branding and name given also others can use the exercises). *LaProf* materials can also be used by school teachers in vocational education and other areas.



## UN NOU CADRU ȘI MEDIU DE ÎNVĂȚARE PENTRU ADULȚI - COMUNITATEA VIRTUALĂ

CONSTANTIN CUCOȘ<sup>1</sup>

### *Abstract*

Adult Education takes place not only in formal institutions but also through information and communication technologies. The article aims to analyze the benefits of this virtual learning group, showing that adults transmit specific values and relevant experiences, each other, through new media channels and the Internet. The author attempts to point out that, now and in future, can learn through virtual learning community.

Formarea adulților se realizează nu numai în cadre formale, instituționale ci și prin intermediul unor ocazii generate de noile evoluții din peisajul comunicațional contemporan. În condițiile transformărilor tehnico-sociale actuale, asistăm la o reconfigurare a grupurilor de învățare, acestea fiind pe alte criterii decât cele tradiționale. Grupul de învățare, în mod obișnuit, presupune obligatoriu coexistență spațială a mai multor indivizi, acțiune simultană în comun, interacțiune prezentă, inter-relaționare concretă prin diverși stimuli. Dincolo de acest grup de învățare, care își păstrează în continuare valabilitatea, apare și o altă ipostază a acestuia, cea virtuală.

### **Trăsături ale comunității virtuale de învățare**

Ce este comunitatea virtuală? Prin comunitatea virtuală înțelegem acea grupare de oameni care inter-relaționează reciproc prin intermediul sistemelor de informare și comunicare, realizând schimburi simbolic-valorice, în anumite domenii de interes, ce ele-însele construiesc și mențin astfel de apartenențe. Modul de comunicare și precum și conținuturile adiacente coagulează, întrețin și dau consistență mediului formator astfel născut. Acest tip de comunitate se definește prin cooperarea și schimbul permanent de informații. Avem de a face cu o comunitate epistemică, ce structurează o *noosferă*, scop și referențial al întemeierii ei. La nivelul acestui tip de solidarizare socială se află următoarele componente [cf. Charbit, Fernandez, 2002]:

- o componentă identitară: pentru a adera la o astfel de comunitate trebuie să te recunoști printr-un sistem de valori;

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- o componentă cognitivă: între membri se fac schimburi de informații, de cunoștințe, de sfaturi;
- o componentă ce ține de logica interferenței și încrederii: până una alta trebuie să iei de bun ce proclamă alții;
- rezultanta acestor elemente diferite conduce la o oarecare supunere a alegerii individuale față de „rațiunea” colectivă: accepți, în grade diferite opinia generalizantă a celorlalți.

Comunitatea virtuală de indivizi este generată și devine dependentă de performanțele unei rețele tehnice. Fără existența unei infrastructuri de acest tip nu poate să apară sau să funcționeze o comunitate virtuală. Gradul de virtualizare este condiționat de gradul de tehnicizare. Fiecare tehnică de ordin cultural generează niveluri și grade diferite de virtualizare a societăților (limba latină – într-o vreme, tiparul – mai apoi, internetul – acum). O comunitate devine virtuală din moment ce membrii ei utilizează rețeaua informatică pentru a stabili interacțiuni pe linie profesională, educațională, interes privat, hobby-uri etc. Comunitatea ca atare este constituită din oameni foarte concreți, identificabili undeva în timp și spațiu; la rigoare, ea este reală, pentru că este formată din indivizi; doar schimburile sunt „eterate”, parvin și se întrețin din locuri distante, întrucât valorile vor circula de la unii la alții prin intermediul unei rețele informatice (internet, intranet, extranet etc.).

Comunitatea virtuală se adaugă, firesc, peste cea reală, relativizând-o, prelungind-o și complicând-o. Ea nu se mai de finește prin proximitate fizică. Noul spațiu virtual recuperează câte ceva din notele spațiului real, dar adaugă și ceva în plus. Posibilitatea de a aborda pe oricine prin conectivitatea sincronă sau asincronă ascunde în ea germeii unei solidarități misterioase. Când știu că cineva simte ca și mine, chiar dacă nu-l am în prejmă (mai ales atunci!), dorul comunicării se întetește. Chiar dacă ea nu este palpabilă, concretă, „comunitatea” nou constituită generează un gen de atracție deosebit de puternică între indivizi. Nevăzutul, neapropiatul aprind și întrețin, mai tot timpul, focul speranței.

Există anumite caracteristici ce definesc această realitate sociologică. Christophe Hebrard (2001) identifică următoarele note ale comunității virtuale:

- relații preferențiale pe bază de aceleași interese simbolice (fiind independenți de mediul geografic și de distanțele fizice, actorii aderă conștient și independent la o serie de valori, prin regruparea după orizonturile de interes și afinități);
- un anumit nivel de interactivitate (participarea prin discuții e-mail asupra unor subiecte);
- comunicare sincronă (dialogul în timp real permițând indivizilor dezvoltarea unor relații spontane, încărcate de emoții, de „naturalitate”);

- diversitate a participanților (emergența unei comunități virtuale presupune interacțiunea unui număr suficient de persoane, de obicei mai mult decât două, din zone diferite, cu culturi și experiențe multiple );

- un nivel minim de adeziune și de participare (atașament, adeziune comună, implicare emotivă, durată a relației, angajament moral și recunoaștere reciprocă);

- gestionarea unui spațiu simbolic comun (socialmente produs, dar care nu are materialitate).

Comunitatea virtuală se organizează pe un fundament afinitar, prin animarea acelorași vise, năzuințe, valori. Ea se deterritorializează și se rupe de rigiditatea calendarului. Se naște un nou spațiu-timp, mult mai fluid și mai mobil, în care fiecare individ intră cu ritmul propriu în rețeaua de interconexiuni ce mereu se reface, se recompune. Comunității virtuale i se poate atașa și o inteligență adiacentă, caracterizată, după Levy (1995, p. 65), prin patru dimensiuni:

- o conectivitate sau un „spațiu” în constantă transformare; asocieri, legături, căi;

- o semiotică, adică un sistem deschis de reprezentări, de imagini, de semne de toate felurile care circulă în acest spațiu de conexiuni;

- o axiologie sau sistem de valori care determină tropisme pozitive sau negative, calități afective asociate reprezentărilor sau zonelor spațiului fizic;

- o energetică având rolul de a specifica forța afectelor generate de imaginile corespunzătoare.

### **Tehno-cultura, un liant și un nou referențial în educația adulților**

Cultura de tip cyber constituie un mediu care facilitează, dar și dinamizează raporturile de învățare între actorii sociali. Orice mare invenție cu impact social are reverberații adânci asupra structurii și dinamicii sociale. Noile sisteme de transport și de circulație (naveta zilnică în tren sau cu avionul, video-conferințele sau video-telefonul etc.) schimbă percepțiile și reprezentările noastre despre proximitate, fluidizând și dilatând spațiile de muncă, de învățare sau coabitare. ”Fiecare „mașină” tehnosocială – observă Pierre Levy (1995, p. 20) – adaugă un spațiu-timp, o cartografie specială, o muzică singulară unui fel de înveliș elastic și complicat unde întinderile se supra-adaugă, se deformează și se conectează, unde duratele se opun, interferează și se suprapun. Multiplicarea contemporană a spațiilor face din noi nomazi ai unui stil nou: în locul urmării liniilor de timp trasate și al migrării în sânul unei întinderi date, noi sărim dintr-o rețea într-alta, dintr-un sistem de proximitate în următorul. Spațiile se metamorfozează și se bifurcă sub picioarele noastre, antrenându-ne către heterogenează”. Se nasc astfel, la

nivel individul și social, noi percepții și noi oportunități de manevră de natură cronologică sau topologică.

Emanciparea tehnicului și a economiei are reverberații asupra funcționabilității sociale. Creșterea ponderii acestora se face printr-o absorbție a socialului de către tehnocultură. Oamenii, dorințele lor, voința etc. sunt captate și remodelate în conformitate cu noua ordine instrumentală. Oamenii se transformă în utilizatori, consumatori. Noile tehnologii informaționale și de comunicare determină o „mașinizare” a socialului. „Anonimatul generalizat al mega-mașinii tehnosociale demoralizează raporturile sociale și politice ale colectivităților umane. Constrângerile care apăsă asupra omului politic ca și asupra inginerului, asupra producătorului, asupra consumatorului determină renunțarea la orice considerent etic. Eficiența este singura valoare recunoscută de către cei care manevrează mașini. Totuși, această eficiență devenită un scop în sine este autodistructivă și face din mașină o mașină infernală” [Latouche, 2004]. Trebuie vegheat ca tehnicul să nu „mecanizeze” conduitele individuale sau organismul social vizat ca întreg. Există un astfel de risc de care trebuie să fim mereu conștienți.

Internetul creează noi structuri asociative, atât formale și acreditate, cât și informale, glisante, mai puțin recunoscute social, dar având o funcționalitate, totuși, societală. Pentru unii, sintagma de „web social” are o consistență viabilă. Gloria Mark, de pildă, invocă o astfel de expresie în înțelesul de „infrastructură prin care oamenii pot face uz de o experiență on-line integrativă pentru a se raporta sau a face uz de o informație socială, chiar și atunci când nu au o colaborare formală” [2001, p. 249]. Această experiență este generatoare de o anumită coeziune socială, cu implicații formative asupra ansamblului societal.

Noile realități sunt stimulate și de alte presiuni, cum ar fi raționalizarea costurilor formării, creșterea populației ce aspiră la un nivel înalt sau continuu de formare, multiplicarea diapazonului tehnic de susținere a educației, dorința de a intra direct și imediat în contact cu diverși experți, revalorizarea existenței private și a vieții de familie etc. Chiar dacă deocamdată „campusurile” virtuale sunt destul de vagi, este de așteptat ca ele să se înmulțească în următorii ani, specializându-se pe domenii de formare. Ele trebuie circumscrise procesului de mondializare și internaționalizare a formării [vezi Robertson, 1992], de înscriere tot mai evidentă a acestora pe traiectele comercializării și industrializării.

Delocalizarea și virtualizarea spațiului de învățare conduc la o modificare a design-ului învățării, a dinamicii colective și a motivațiilor de instruire. „Locurile și timpurile de interacțiune fiind decalate, asistăm în mod obligatoriu la o modificare internă a rolului interacțiunii în actul pedagogic. Contextul muncii în comun este obiect al unei negocieri, rezultat al procesului de „contextualizare-acțiune”; asistăm, astfel, la o căutare negociată a unui spațiu virtual, pe care se poate așeza

contractul didactic, și a unei „reorganizări-acțiune” permanente a acestuia” [Alava, 2004]. Acest grup de învățare ascultă de o dinamică mult mai complicată, întrucât vectorii ei sunt mult mai evanescenti, greu reperabili și dificil de descris prin instrumente obișnuite.

### **Învățarea colaborativă – principiu al educației adulților**

Educația adulților presupune și o puternică dimensiune relațională, participativă, în sensul că educații transmit unii de la alții anumite cunoștințe, se informează reciproc, produc cunoaștere prin colaborare, prin efort sumativ, personalizat. Mediul informatizat de învățare predispozează la o învățare colaborativă, prin multiplicarea legăturilor dintre educați, prin derularea unor activități cognitive ce presupun asamblări sau adiționări continue de valori ale cunoașterii. Învățarea colaborativă este acea „strategie pedagogică în care se favorizează interdependența cognitivă și socială între educați, luând în calcul diferențele inter-individuale și imprimând un rol activ agenților educativi” [cf. Deguerry, 2004]. Alteritatea (tutorul, coechipierul, egalul) este indispensabilă în învățarea bazată pe tehnologiile moderne. Punerea în acord, dezbateră, întâlnirea directă sau mediată, sincronă sau amânată sunt utile în co-construirea cunoașterii și obiectivarea ei. Departe de a separa și a ghețoiza, universul informatic creează noi oportunități de apropiere și de acroșaj intersubiectiv.

Învățarea colaborativă conexează demersurile singulare ale educatului cu cele ale grupului din care face parte. Se creează un mediu prin care fiecare în parte își fuzionează edificiul cognitiv și-și construiește cunoașterea pornind și de la experiențele sau informațiile altora. Tutorele are menirea de a stimula grupul, de a activa legăturile, de a consilia indivizi sau grupuri, de a valida, consacra, evalua cunoștințe sau căi de aflare a acestora. Se creează o circularitate a demersurilor, o rafinare a acestora în consens cu principiile eficienței muncii în comun.

Internetul constituie un dispozitiv care favorizează și întreține gustul pentru învățarea prin colaborare. Ușurința de comunicare, de consultare, de verificare creează dorința de edificare a unui produs comun (un site educativ, de pildă) ce funcționează ca un referențial comun de învățare. Comunicarea este un mijloc de concretizare a muncii colaborative.

Activitatea colaborativă presupune activități precum:

- schimbul de informații sau puncte de vedere între parteneri;
- circumscrierea unor obiective comune;
- planificarea și gestionarea în comun a timpului de învățare;
- organizarea efectivă a muncii prin detalierea și convenirea asupra unor etape;
- împărtășirea unor experiențe, competențe, cunoștințe validate personal;

- colaborarea și co-elaborarea unor artefacte, produse, conținuturi informaționale;
- validarea împreună a unor ipoteze, sugestii, informații;
- dimensionarea în comun a unor dispozitive de accesare a cunoașterii;
- structurarea și definitivarea unor competențe ale grupului respectiv de învățare.

Munca în echipa virtuală presupune și anumite dependențe (ralierea la anumite obiective, respectarea unui program de activități, consensualitatea asupra unor criterii de reușită etc.), dar și suficientă libertate de inserare în ordinea stabilită a lucrurilor [vezi și Szczypula, Tschang, Om, 2001]. Structura activităților se menține suplă, flexibilă, deschisă. Parcursurile individuale de explorare și de contribuție efectivă se fac și refac, în funcție de posibilitățile personale, chiar de accidente (fericite!) ce pot surveni pe traseu.

Având în vedere că tutorii lucrează de cele mai multe ori cu adulții, ei trebuie să cunoască principiile și metodologia de bază în educația adulților, să dea dovadă de tact, finețe, sensibilitate, să creeze situații problematice interesante, pe măsura caracteristicilor publicului. Este superfluu să mai amintim că aceștia trebuie să dețină competențe speciale de informare și comunicare, să stăpânească noile tehnologii și programe de inter-relaționare directă sau la distanță. Se cer a fi urmărite trei obiective de bază: comprehensiunea și explicitarea nuanțată a conținuturilor, motivarea educaților și personalizarea parcursurilor de învățare. Pot fi imaginate mai multe acțiuni, toate centrate pe responsabilizarea educatului în legătură cu rolul lui în dispozitivul de formare. Tutorele este acea persoană calificată pentru a:

- cultiva dorința educaților de a-și lua pe cont propriu instrucția și educația;
- anima grupul de învățare, incitând pe cursanți în a realiza raporturi virtuale;
- motiva cursanții în a înainta eficient în parcursul de formare;
- ajuta concret educații în a găsi cele mai nimerite strategii sau metode de învățare;
- identifica dificultățile sau blocajele de învățare ale cursanților;
- instrumentaliza cursanții cu strategii de accesare sau stocare a cunoașterii;
- livra scheme de valorizare și interpretare a unor ipostaze ale cunoașterii;
- media relația cu autorul cunoașterii sau cu alte competențe academice;
- distribui și recomanda surse complementare de cunoaștere;
- genera un cumul informațional cooperativ și un plus de cunoaștere;
- răspunde la interpelările și întrebările cursanților (prin e-mail sau direct);
- gestiona interacțiunile grupului și stimula cooperarea interpersonală;
- livra un feed-back pentru cursanți în legătură cu progresele realizate;
- gestiona situațiile de criză și rezolvarea de probleme.

Tutorele trebuie să posede o serie de competențe didactice și relaționare cu totul deosebite. Uneori, acesta este mai important decât conceptorul sau profesorul titular de curs. Un bun tutore trebuie să posede abilități multidirecționale și polimorfe precum:



- cunoașterea principiilor generale ale învățării și a specificității dinamicii psihosociale a grupului actual sau virtual;
- o bună stăpânire a elementelor de conținut și a strategiilor metodice de concretizare și didacticizare a acestora;
- cunoașterea specificității grupului țintă, a motivațiilor și obiectivelor acestuia;
- abilități de comunicare și relaționare față de un public prin definiție multinivelar, eterogen ca vârstă, posibilități, interese;
- stăpânirea unui evantai de metode didactice de desemnificare și interpretare a informației transmisă de suportul de curs;
- aptitudini de concepere și creare a unor situații evaluative și autoevaluative, altele decât cele explicitate la nivelul corpului cursului (tipărit sau într-o structură digitală);
- competențe de consiliere și orientare post-învățare (profesională, educațională, social-culturală).

Consemnele asupra muncii în comun fie sunt prescrise de educator sau tutore, fie sunt propuse de cursanți sau descoperite și convenite în chiar procesul de rezolvare a unor sarcini. Modul de generare pe axa prescriptiv-deliberativ va depinde de specificitatea parcursului de formare (activitățile mai complicate sunt mai atent supravegheate și direcționate de tutori), de vârsta celor care participă la educație (elevii au mai multă nevoie de consiliere, adulții devin mai independenți), de experiența dobândită în domeniul respectiv de învățare sau în autoinstrucție, de politicile educaționale adoptate de diferitele sisteme de e-educație.

Se pot imagina și repartizări atomizate ale sarcinilor, sub forma unor munci individuale, pentru ca mai apoi rezultatele să se asambleze sub supravegherea tutorelui. Important este ca la un moment dat educații să contribuie la elaborarea unui produs comun, care mai apoi să fie repartizat tuturor. Nu este exclus ca la această muncă prin colaborare să contribuie înseși programele de învățare, care, în anumite secvențe, să prescrie ce trebuie făcut de unul singur și ce se cere a fi realizat împreună cu alții. „Logiciilele” tot mai rafinate vor conține în ele-însele astfel de incitări pe linia dezvoltării multinivelare și pluridirecționale a raporturilor dintre educați.

Un statut aparte îl vor avea „întâlnirile” virtuale, prin degajarea efectivă a unor timpi concreți de realizare a schimburilor și de discuții în timp real asupra unor probleme. Tehnologia existentă facilitează aceste activități în comun, chiar dacă ele se realizează în locații diferite (dar sincrone). Mesageria instantanee, video-conferințele, telefonica sunt astfel de modalități de concretizare a educației colaborative. Realizarea unor proiecte de colaborare internaționale presupun secvențial și astfel de conexiuni ale muncii în comun pentru creionarea obiectivelor, conținuturilor și activităților specifice. O parte a activităților

proiective se pot realiza „in presentia”, o bună parte putându-se realiza „in absentia”, prin asamblarea contribuțiilor trimise prin poșta electronică, de pildă. Desigur, colaborarea virtuală poate și trebuie completată cu întâlnirile fizice, ce desăvârșesc și încununează ceea ce s-a început prin racoșările evanescente, virtuale. Consistența și amploarea raportului fizic nu pot fi suplinite prin imaginarea, intuirea sau visarea acestuia.

În concluzie, vom conchide că formarea adulților, în condițiile evoluțiilor contemporane ale tehnicilor de informare și comunicare, presupune o exploatare a valențelor formative ale grupurilor virtuale, o extensie a ocaziilor și formelor prin care experiența umanității difuzează și se extinde nu numai de la antecesorii la predecesori, ci și de la unii la alții, pe o dimensiune sincronă, virtuală, creând o bucurie (reală!) a comunicării și împărtășirii experiențelor la care fiecare persoană ajunge.

### BIBLIOGRAFIE

- Alava, Séraphin, 2004, *Cyberapprendre, un défi de formation*, <http://www.educnet.education.fr/cdi/alava2.htm>
- Charbit, Claire; Fernandez, Valerie, 2002, *Les trajectoires d'adoption des TIC dans les systèmes productifs localisés : vers des communautés virtuelles ?*, Workshop « TIC et réorganisation spatiale des activités économiques », ENST Bretagne, BREST, 21-22 novembre 2002.
- Cucoș, Constantin, 2006, *Informatizarea în educație. Aspecte ale virtualizării formării*, Editura Polirom, Iași.
- Deguerry, Nicolas, 2004, *L'apprentissage collaboratif : cooperer pour apprendre, apprendre a cooperer*, in Agora, decembrie  
[http://ressources.agora.org/frontblocks/news/papers.asp?id\\_papers=1468&ID\\_THESAURUS\\_NODES=1045](http://ressources.agora.org/frontblocks/news/papers.asp?id_papers=1468&ID_THESAURUS_NODES=1045)
- Hébrard, Christophe 2001, *Le village virtuel 3d. Introduction à une ethnologie des communautés virtuelles* în <http://alor.univ-montp3.fr/cerce/revue.htm>.
- Latouche, Serge, 2004, *La megamachine et la destruction du lien social*, în <http://homestudio.thing.net/revue/content/latouche.htm>
- Levy, Pierre, 1995, *Qu'est-ce que le virtuel?*, Edition La Découverte, Paris.
- Mark, Gloria, 2001, *Social Foundations for Collaboration in Virtual Environments*, în Tschang, Ted; Della Senta, Tarcisio, *Acces to Knowledge. New Information Technologies and The Emergence of the Virtual University*, International Association of Universities and Elsevier Ltd, Oxford, Paris, Tokyo etc.
- Robertson, R., 1992, *Globalization, Social Theory and Global Culture*, Editura Sage Publication, London.
- Szczypula, Janusz; Tschang, Ted; Vikas, Om, 2001, *Reforming the Educational Knowledge Base*, în Tschang, Ted, *Acces to Knowledge. New Information Technologies and The Emergence of the Virtual University*, International Association of Universities and Elsevier Ltd, Oxford, Paris, Tokyo etc.

## **SOCIAL AND PROFESSIONAL VULNERABILITY OF ADULTS IN THE INFORMATION SOCIETY**

ELENA-ADRIANA TOMULEȚIU<sup>1</sup>, DOINA DAVID<sup>2</sup>

### *Abstract*

The paper we propose represents the results of an inquiry based on a questionnaire. The imperative from which we started this investigation was to find adequate ways to respond dynamically to the forming needs of adults on their way of social and spiritual findings. Reality is proving that most people are not contemporary with their time as the traditionally possessed system of knowledge is far behind the level of current knowledge. Social, economic and technological advances – on the work market and in social life – create expectations of higher and more sophisticated abilities and knowledge. Therefore, the purpose of the study is to achieve two major objectives: the identification of the problems which the adult population is confronting; the evaluation of educational, social and cultural needs and expectations of this category. Knowing that this matter is very important as possible educational intervention, no matter from what level, must not start from general premises, but from a realistic analysis of certain states. If not, any initiative or action is doomed to failure or the effects are extremely harmful.

*Keywords:* adult, education, professional satisfaction, competence

### **Motivation of the Paper**

We live in a world in which transformations on all planes of society and economic and social advances have a great influence on the work force. More and more, the need for analytical thinking in the solution of complex problems, aptitudes in foresight and planning, creativity and flexibility are becoming more obvious. Technological aptitudes (especially in the field of IT), the careful structuring of free time and the quick and efficient processing of information are becoming more and more burdensome. Despite this, reality demonstrates that the majority of people are behind the times. Their level of knowledge is far behind the current level achieved by science. In a changing society, continuing education is a primary course of action for social development and particularly innovation. [European Committee, 2006, p.16] The education of adults should develop simultaneously with the burst in knowledge, with the necessity of an active and clear partaking in the development of society. Unfortunately, in our country, the

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interest for continuing education and the rate of participation of adults at such programs is low. The activity report of the Ministry of Education, Research and Youth (currently the Ministry of Education, Research and Innovation) in 2007 reveals that the value registered by the indicator regarding *the participation of adults between the ages 25-64 at continuing education and professional formation* (an indicator used in the calculation of the score of innovation) is of only 1.6% in 2005, in comparison to the EU average rate of 11%. [Mery, 2007] This trend persisted in the following years, thus the perspective of facilitating factors regarding innovation in the current Romanian context remain modest. This explains the fact that the Innovation Scoreboard of 2008 places Romania in the group of catching up countries, the last of the four groups of countries with a score below the average of other member states and the last country of the group. (with an average of 0,18 compared to 0,45, that of the EU). To better understand the context, the first group, that of the 'Innovation Leaders' is composed of Denmark, Finland, Germany, Israel, Japan, Sweden, Switzerland, the UK and the USA. The second group, that of the 'Innovation Followers' includes Austria, Belgium, Canada, France, Iceland, Ireland, Luxembourg and Holland. The third group, the 'Moderate Innovators', includes Australia, Cyprus, the Czech Republic, Estonia, Italy, Norway, Slovenia and Spain. In the fourth group, besides Romania, Bulgaria, Croatia, Greece, Hungary, Latvia, Lithuania, Malta, Poland, Portugal and Slovakia can be found. [Stoica, 2009, p.127]

Continuing professional formation must become a priority in our country as well, due to the fact that through education can one's perspectives broaden to new realities and possibilities of life and strengthen the desire for bettering, thus enriching many aspects of one's life. All in all, the most important and profitable long-term investment lies within the human being. Before coming with suggestions for such a course of action, we tried to decipher the attitude of the adult towards education, how well the adult measures himself up to the problems he's facing, how fulfilled he is professionally and how involved he is socially and from a Community standpoint. The imperative from which we started this investigation was to find adequate ways to respond dynamically to the forming needs of adults on their way of social and spiritual findings, ways which stem from the understanding of 'the adult' as a whole and of his problems, interests, needs and social, professional and spiritual expectations.

### **The Objectives of Research**

This study aims to identify the problems confronted by adults and their attitude towards these problems, as well as their educational, social and cultural expectations. Possible educational intervention, no matter from what level, must

not start from general premises, but from a realistic analysis of certain states, otherwise it might be doomed to failure.

### **Methodology of Research**

The method used in our study was that of an inquiry based on a questionnaire handed to adults in Mures County. A pre-inquiry with the goal of pre-testing and validating the instrument of work was used in the making of the questionnaire. The questionnaire was composed of 5 major chapters:

1. Social Problems Confronted by Adults. Their Attitude Towards These Problems and Their Responsibility
2. Professional Fulfillment and Competence
3. Educational Needs
4. Access to Information
5. The Use of Spare Time

### **Determining of the reference population and the establishing of the cross section**

Within the reference group, three major age groups have been distinguished (adults between the ages 18-25; 25-45 and over 45 years of age) with the premise that educational preoccupations of each category of age are somewhat different due to biological, psychological and social factors, as well as acquired professional statuses. In case of the first age category, a greater interest in formal education is to be expected due to the fact that the young adult is open to professionally formative activities. The young adult is well within the process of integration into the work market. Within the second category, the emphasis of interest shifts to informal education since, by the age that defines the category, the subjects are supposed to have graduated some form of education and the interest for a prosperous family life and the defining of moral and educational values within it accentuates. In the third category, interest is focused mainly on informal education, the productive use of spare time and the psychological need of maintaining one's sense of self-worth.

The cross section was comprised of 328 subjects, calculated by a probabilistic procedure, taking into account the following characteristics: age, gender, level of education (high, average, low)<sup>3</sup>

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<sup>3</sup> In the current study we did not proceed with the differentiation of the cross section by the criterion of provenance – rural and urban – due to the fact that the issues highlighted by the study are of great generality. We have carried out a careful analysis of the formational

### Results and Interpretations

1. Social Problems Confronted by Adults, Their Attitude Towards these Problems and Their Responsibility.

In the first phase, the aim was to identify the attitude of the subjects towards the problems they confront and the ways through which they can be solved. Thus, the table of responses is as follows:

Table 1. *The attitude of the subjects towards the problems they confront*

Responses	Totally agree	Partially agree	Partially disagree	Totally disagree	I do not know
Almost all problems can be solved.	64%	36%	0	0	0
Most of the times I need help in solving my problems.	13%	47%	31%	9%	0
There is always somebody to help me with my problems.	16%	44%	20%	16%	4%
Most of the times I do not know who to turn to with solving my problems.	4%	22%	31%	42%	1%
I am solely responsible for my future.	60%	33%	3%	2%	2%

It can be observed that the vast majority of the subjects totally agree with the first and last options for a response included in the questionnaire ('Almost all problems can be solved.' And 'I am solely responsible for my future.'). The third option has received mixed responses. The fact that a large percentage of subjects feel the need to ask for assistance in solving their problems or that there is always somebody they can rely on explains the importance of inter-human relations for the subjects as an essential condition of the success in solving critical aspects of their lives but also for the failure of self-responsibility. This demonstrates the fact that the transition from a traditional to a modern society kept its related bonds. There are numerous cases in which a loved one or a family member can be asked to look for a workplace, to solve an economic problem or even do a favor free of charge.

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needs of adults from a rural background within a research published in *Institutiile rurale de educatie* (2005), Cluj-Napoca, Risoprint.

The goal of stating three major problems that the subjects face is to produce a classification of immediate necessities and to analyze the existing needs of the age categories. Thus, the problems considered major by the subjects are represented in the following diagram:

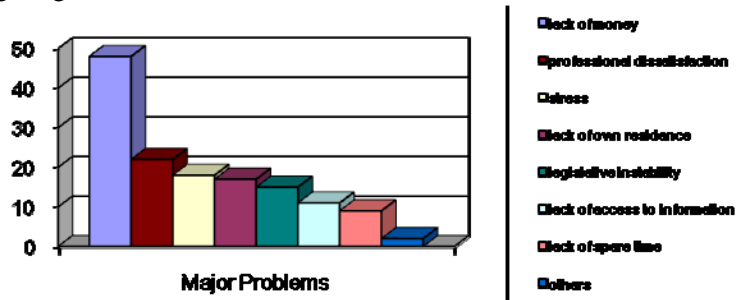


Figure 1. Major issues of the subjects

Although the responses were diverse, they can be integrated both into Maslow's pyramid of needs and Vroom's expectancy theory. Some subjects offered responses referring to problems of external origin, uncontained by their desire of fulfillment or individual daily issues. The subject's responses are of general character, envisaging society as a whole, or even global: the economic and health crisis, educational issues etc.

By referring to each age group, some differences can be pinpointed within the responses regarding specific issues faced by category. Furthermore, the responses vary at a greater degree as the age of the subjects decreases, probably due to the fact that the young are more susceptible to facing setbacks and due to their lack of experience, unlike the subjects of older age whose aspirations are well defined.

The lack of money is a general issue highlighted by all age groups: both the employed – in any field – and those still under the financial support of their families face the same shortcoming. External issues have a greater impact on the lives of young people due to the fact that they have not yet been faced by the situation of financially supporting another person (in many cases, not even themselves), their primary concern being the finding of a job that can bring satisfaction. Unlike the other age groups, the young identified 'practical training' as an issue.

The issues of the second age group are based on the self. Physiological and security needs, social needs, the lack of money and residence, professional dissatisfaction and insecurity are highly placed in the category of major issues that this age group faces. Awareness of the fact that professional success requires quality professional training becomes an actuality and the fact that the

aforementioned training can bring a certain level of independence both professionally and in decision making.

The responses of the age group of subjects over 45 years of age generally reflect insecurities probably caused by insufficient adaptation to the competition regime and the market economy. The majority of subjects consider that their workplace has lost importance, the impact of stress has grown which in turn affects their health and performance and that they are being disregarded by their younger colleagues.

The level of professional training and preparation has not been pinpointed as an issue by the cross section. The questions asked within the further items aim to reveal the motives.

## 2. Professional fulfillment and competence

Beginning the series of questions regarding professional fulfillment and competence, 73.3% of the subjects declared that they are satisfied with the chosen education/profession, only 8.8% are dissatisfied and the remaining 17.7% remain undecided.

By correlating these figures with previous data that revealed the professional dissatisfaction of the subjects, a question arises: if both professional dissatisfaction and satisfaction have a high frequency, what lies at the basis of this apparent contradiction? A few general motives might be organizational shortcomings, the management policies regarding human resources, the legislature etc. One example can be the story of a social worker, who, upon employment, considered the job to be a great opportunity to put his knowledge into practice, but instead of counseling, fieldwork and the analysis of concrete situations, the force of certain laws restricted the liberty of carrying out his duties.

This explains the fact all subjects questioned consider their professional preparedness to be at least average, 11% rating their professional competence with the maximal amount of points.

In order to partially decipher the aforementioned contradiction, the subjects have been asked to give examples of barriers that interfered with the process of fulfilling their duties. Among the responses received, only one can be considered of external origin, independent of the subject's person, that of inequality of chances. It is interesting that over a third of the subjects of the inquiry consider themselves to be discriminated professionally, although a high percentage of subjects do not possess computer skills, nor do they speak a foreign language. These outcomes have a vastly negative effect, taking into account the impact of the computer in the work market of today and the knowledge of a foreign language in a world that



aspires towards opening the cultural barriers between nations and the broadening of professional cooperation.<sup>4</sup>

Probably the aforementioned barriers coupled with professional dissatisfaction through the lack of money lied at the root of at least a theoretical search for possibilities of professional reintegration for 43% of the subjects.

### 3. Educational needs

By considering the formative interests expressed by the adults in the questionnaire, the institutes of continuing education would truly become functional. By referring to the educational requests expressed by adults, main aspirations and areas of interest can be distinguished. By analyzing the data obtained, computer science and foreign languages retain the first two positions, which leads to the fact that adults feel the need to learn and develop the aforementioned general and basic aptitudes. On the other hand, many opinions stressed the enrichment of professional and general knowledge.

The motivation of the subjects in enriching of their knowledge in the fields above are extremely diverse and interesting. The fact that more than half of the inquired cross section considered choosing improvement in a certain field as important for their general knowledge can be largely attributed to the Romanian educational system that had existed for a long and time had emphasized the creation of a solid base of general knowledge instead of professional training. In addition, approximately one third of the responses include profession as motivation, meaning the workplace and professional reorientation. Thus, a previous observation is validated, according to which only 40% of the subjects considered the possibility of reorientation.

Although the subjects might actually face the need for professional reorientation, many of the inquired possess no knowledge of the mechanism of such a process. Upon being asked 'Where would you turn for professional reorientation or development?', the majority of subjects replied indicating AJOFM ( the County Agency for the Occupation of Workforce). This might indicate an actual desire for requalification and knowledge about the organizing of requalification courses. However, a very small percentage of subjects would turn to other organizations due to the questionable nature of the certificates or diplomas issued by them. This constitutes a problem for the Romanian work market, due to the fact that before employment, an officially recognized diploma is requested,

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<sup>4</sup> Computer and foreign communication skills are new general and basic aptitudes that represent criteria of the evaluation of literacy of the population. Their importance is also underlined in the Explanatory Memorandum on the Treaty of Lisbon on lifelong learning.

many times in favor of personal skills and competence. Approximately 40% of the subjects consider formal education to be the main source of professional qualification (such as university or arts and crafts courses). This is an acceptable situation for people who wish professional reorientation, but impractical and useless for those who wish to further develop their professional skills previously acquired. The fact that only the forms and institutions above have been mentioned might indicate the fact that adults do not know the full array of opportunities for continuing education for adults available on a local level. Whether the lack of access to information or the incapability of adults to inform themselves is a factor will be revealed in the following chapter.

#### 4. Access to information and the attitude towards information

This chapter of the questionnaire is relevant to the way the population perceives continuing education, further development and learning as an adult. Approximately 40% of the subjects are informed through written and audio-visual media. Radio and TV stations have an ever-expanding audience and play a major impact on day-to-day life and they have become the main source of information. This is particularly true to adults over 45 years of age, probably due to the lack of interest in other forms of media or spending of spare time, not knowing other possibilities or even convenience. Very few that belong to this age group use the Internet as a source of information and this might even be a cause why 46% of the subjects failed in different situations due to lack of information.

The reasons why almost half of the subjects are unable to access information are relevant: 37.5% do not know how to use certain sources of information, 30% do not know where to find useful information, 10.5% due to the lack of spare time and probably a fairly large percentage due to lack of interest. In other words, over two thirds of subjects that were unable to find necessary information either do not know how to find information or use sources of information. Paradoxically, although many subjects consider themselves to be highly qualified and the number of subjects displeased with the methods by which information can be accessed is high, for many people these obstacles actually are themselves.

#### 5. The use of spare time

Choosing possibilities by which spare time can be spent leaves much to be desired among the adult population. Television is not only the main source of information, but it has also become the favorite pastime in every household. To many, television cannot be replaced by cinema, theater and sports. Our research reveals that, sadly, adult interest for reading, sports, theatre etc. is extremely low.

Adult preoccupation in informal and social activities unrelated to their work is insignificant. This might be the result of the poor development of the non-governmental sector and the lack of activities that serve a well-defined scope, complementing the profession of choice. Unlike in our country, where the community is not of interest for the common man who rather takes part in groups for entertainment purposes, in well-developed countries there are significant activities for adults that benefit the community.

### **Conclusions**

In summary, the majority of adults who filled out the questionnaire have high expectations, but their efforts to fulfill them are minimal. The fear of tomorrow, the race for additional revenue, daily stress, dissatisfaction due to the quality of life, the lack of basic attributes requested by modern society, the inability to adapt to certain social and professional contexts and high vulnerability are the main issues of adults. We believe that at the root of these problems lies the insufficient development and furtherance of educational programs for those who can better perform socially and professionally and for those who have the potential of becoming an efficient workforce but need qualified guidance.

In conclusion, we consider that the current crisis of the Romanian society cannot be solved by solely implementing economic and administrative reforms. Cultural and educational measures must also be adopted. It is well established that, in modern societies, education and continuing formation are fundamental fields in reducing poverty and for social development. [Stoica, 2006, p. 242] Education must become a primary concern in our country as well, an education appropriate to the adult's actual needs, one that stimulates activity and creates awareness of its own value.

### **BIBLIOGRAPHY**

- Cîmpean, E.A., 2005, *Instituții rurale de educație*, Editura Risoprint, Cluj-Napoca.
- Stoica, L. (2009), "Accesul la educație continuă, factor generator de inovatie socială", <http://revistacalitateavietii.ro/2009/CV-1-2-2009/13.pdf>, pp. 127.
- Zamfir C., Stoica L. (coord.), 2006, *O nouă provocare: dezvoltarea socială*, Editura Polirom, Iasi.
- \*\*\*, 2000, The European Commission, *A Memorandum on Lifelong Learning*, Brussels, <http://www.bologna-berlin2003.de/pdf/MemorandumEng.pdf>, pp. 10.
- \*\*\*, 2007, The Ministry of Education, Research and Youth, *Starea învățământului din România*, Bucharest.
- \*\*\*, The European Commission, 2006, *Putting knowledge into practice: A broad-based innovation strategy for the EU*.
- The Commission's Communication, Bruxelles, [http://eur-lex.europa.eu/LexUriServ/site/en/com/2006/com2006\\_0502en01.pdf](http://eur-lex.europa.eu/LexUriServ/site/en/com/2006/com2006_0502en01.pdf)



## **TODAY’S YOUTH AND THE INFORMATION SOCIETY – PROFESSIONAL DEVELOPMENT CONTEXTUAL RADIOGRAPHS AND MEANINGS**

IOAN NEACȘU<sup>1</sup>

### *Abstract*

The analysis of the young generation’s evolution within the adults’ social, informational and professional space is definable in an integrative manner by taking into account values such as: globality, competence, competition, knowledge society, instrumental informational communication, standards of quality, innovative motivation a.s.o. According to the views expressed in the study, the following can be considered as obvious sustainable arguments in evaluating the processes and progress made in the youth’ professional development: the size of the investment value in training human resources, the stability of educational policy strategies, the quality of the basic and transversal competencies specific to the system/National framework for professional qualification, the effectiveness of information technology usability and efficiency indicators, the valorisation of personal and institutional continuous learning projects.

*Keywords:* globalization, continuous learning, professional competence, useful knowledge

### **Context and value connections**

A review of the passage from the model or from the reality of being young towards becoming an adult is not at all simple. This is particularly true if what we wish are not generalized or subjectively adjusted reflections to make them facilitating and not opposable with respect to what we used to be yesterday, we, today’s adults. We envisage rather to assume the status of counselors, of reflective actors, useful in identifying, acceding and using better the information sources, instruments and experiences that can prepare the young person of today for the world of tomorrow. We envisage the young person still studying in lecture halls, practising the exercises of sound learning within the logic of professionalism, wishing to master sets of basic and transversal competencies which should ensure them opportunities and chances to a work place on the competition market. A

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market which has become unpredictable as to its standards of quality and competitiveness.

The context is well-known, but not yet sustainable enough from the point of view of the value of globality, of the useful knowledge competition, of the motivations generating impulses towards a performant professional route, of the realistic premises regarding the achievement of the personal project, as well as of the limits upon facing the possible risks and blockages of a society with difficult to anticipate changes and innovations. Justifiedly, the context demands yet another type of political, economic, social, cultural and educational management, maybe even a performant strategic self-management.

Moreover, a new conception as regards the standards visibility is necessary, especially with a view to their centering upon: the substantiality of the tests for creation and added values, the quality of the models of interactivity and social cohesion, the discipline of the effort invested in professional training, the power of motivation and the efficiency of the mental element and of the derived actions under poorly determined conditions, but which are under the incidence of the information or highly informatized society.

The young generation and the adults' expectations are equally connected to the information society paradigm by means of audacious projects requiring significant investment in scientific research, in education and professional training, in sustainable development and innovation. The drawing up and observance of quality standards in the training for a profession/set of profession become firm options, in order to get an active life style, as well as viable social-moral and characterial values.

The thus defined project does not necessarily mean that the actions proposed are successful. The international competition is often hard to face. The ever more numerous competitors' conduct is also unpredictable, not always governed by deontological standards and transparency. The observance of the game rules falls under the incidence of unwanted rivalries, of the explosion and evolution of new competitors both from the traditionally powerful countries – the USA and Japan, the strong arch of EU-7 as well as, more recently, from the emergent countries, such as China, India, Malaysia, Brazil, South Korea or Singapore.

### **Supporting arguments. Predictable consequences**

The strategically oriented analysis shows us that the arguments regarding the conditions of evaluation of the progress in the field of technologies applied to education, professional training and formal education in particular can be placed in

several areas of interest, which can be observed and defined as priority options from the value viewpoint. Here are some of those useful to our analysis.

a. The percent from the GNP given to education as a whole, with flexible balancing and prioritizing among its components – basic education (education for all), vocational education, higher education, research and innovation in education, nonformal education etc. (total percent – over 6 - 8%).

b. Strategies of educational policy oriented to finishing high school, post high school and university studies, against the background of achieving the necessary balancing in order to have a competitive market of highly qualified human resources.

c. Reducing the gaps between people who have a degree, a recognized form of qualification, their chances on a labour market with oscillating supply. From the perspective of the informational society those statistical data will get relevance that is meant to support, by their evolution, the generation of positive images such as: (i) the rate of unemployment with young people of 15 -24 years of age, on levels of education, residence and sexes, which should as low as possible; (ii) the rate of employment of the population aged 15 – 24, on levels of education, residence environments and sexes, which should be significant; (iii) the rate of insertion of the graduates of various education and vocational training levels in the labour market over the last 10 years, which should be progressive and relevant for the evaluation of the examined situations.

d. Another statistical argument could be represented by the examination of the indicators expressing the relationships between the potential of the young generation and its status as a user of the community instrumental values, viz. connection to the Internet, as an element of the information technology. For an area considered essential for the analysis, we mention: on the EU-27 territory, estimations would show that in 2007 most of the firms, as well as 54% of the households (domestic consumers) had access to the Internet. Major differences were identified at national level: 83% of the households in the Netherlands had access to the Internet, while in Bulgaria only 19%. This shows also minimal competencies in terms of information technology usage. The EU target is the rapid reduction of the digital gap.

e. A strong argument in the area examined is the positive involvement (and not a negative one, as that of the Romanian hackers is considered) of the young generation in the research and development of the new information technologies, against the background of certain significant investment from the GNP. Thus, in the EU, the average is 1.83%, in the USA it is 2.6%, in Japan – 3.15 %. We should note though that for some EU countries, such as Finland and Sweden, the percent is higher, while in other respects it is much lower.

The consequences of the intensive use of the information technology are sometimes resented more strongly as far as the work quality is concerned, which becomes cognitive information itself, structured and functional, creating professionalism and added value. At the same time, the information technology, as an intensive source of professionalism can be found reflected in the quality, democratic character, efficiency and responsibility of the interactivity between the social, administrative, juridical, economic, cultural and political institutions and the labour market. The consequences can be identified at the level of the personal projects of the young generation. More explicitly, the information technology is reflected in the visible transformations taking place at the level of guidepost indicators such as:

- independence / autonomy of projects;
- access, reliability , communication;
- chance of knowing and getting a job;
- level of command over the know-how of a set of professions;
- quality of spending free time;
- adaptability to the nature of the organizations and of labour, with the redesigning of the activities borderlines (ap. Duval, 2000).
- redistribution of the networks concerning the workforce supply on a market menaced by automatisms, compressions and unpredictability.

### **Critical examination, constructive signposts and models**

Speaking about the logic of availability of Information and communication technology, especially as digital information in networks of education, a young researcher and teacher (8) mentioned some facilities of this technology for the educational area. We present them below, introducing a significant note of personalization:

- Solving the learning problems by using the available information;
- Formulating questions which orient the discovery and getting knowledge about the world around at a faster pace, perhaps, though more superficial;
- Increased interactivity, especially at the level of generations, without eluding the presence of certain tensions;
- Multiplied, rapid and low cost sources of information;
- Organizational facilities, modular, without constraints for a varied and sometimes geographically dispersed population;
- Reduction of barriers to the adults' continuous education/learning, without the interruption of the professional tasks and timing;



- Flexible passage towards the new economy as a result of rapid easy cheap accessing, processing and storing;
- Implementation of the modern economy, based on three modalities – digital, of network and informational – which ensure the flexibility, mobility of combinations and the sources globalization;
- Generation of an open inspired humanistic reflective state of mind, avoiding the limitations of the technological determinism and identifying new forms of manifestation of the connections between the formal and the nonformal a.s.o.

The attentive inventory of the above indicators raises some problems particularly connected with: a new vision of the young generation over the “globalization” paradigm and the reduction of the contradiction among the centres of interest at the level of the state policy and of the private ones.

Let us examine them in a synthetic manner, also invoking the young generation transformative collective mental element:

a) Globalization, the youth and the informational society. The triad imposes the presence of some key concepts, some in the area of certain tensions such as: income vs profit; safe work places vs the human resources and the capital dynamic; protection vs discretionary regulation of technological transfer and of innovation; forming of competencies and their transparency vs competitiveness with the preservation of the technological secret; innovative vision by egocentric values vs the vision of strategic alliances and niches, with stress on the respect for intellectual property.



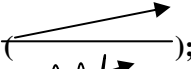

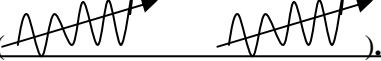
b) The European youth and the educational European policies. To note here the expectations and requirements oriented mainly towards: availability and increased access to the support services, to the electronic educational programs, to the cultural heritage in digital format, the multiplication of the media sources in different languages, the existence of good practices guides, the design of new learning strategies and methods, the formation of teaching staff performant in terms of scientific, pedagogic and digital competencies.

c) Youth, associative spirit and globalization. The optimistic vision regarding the happy globalization was sometimes promoted by the so-called ideological consensus, which is no longer shared today by all the young people. They believe, as stated in the French newspaper *Liberation*, that “another world can be built”, avoiding the radical fissures in the order of things by means of a generalized movement known as ‘altermondialism’.

The motivations are linked to the unfair character of the North – South relationships, the impossibility of avoiding crises connected to financial speculations or the salvation of the cultural diversity of the world, the inappropriate

fragmentation of the public space, reluctance to the (still debatable) hypothesis of the global warming effects. As a theory, globalization used to be at the beginning (as Robert Reich, the USA Labour Secretary, would write in 1991), in its essence, of an economic nature, the commercial, industrial and financial institutions would be interconnected and homogeneous, while the information and communication technology, including long distance education would follow that trend.

It would be important to ask: which of the social change models and theories specific to Eastern-European countries (see Ingemar Fagerling and Lawrence Saha's analyses, 1989) can offer today an optional field favourable to the young generation raise? We can examine them, accepting the functionality of the diagrammatic comparative criterion below, based on expert type analyses (see Cummings, 1999, pp. 37-38):

- i) **traditional cyclic model** ();
- ii) **leap model** ();
- iii) **linear ascending model** ();
- iv) **cyclic linear model** ();
- v) **parallel cyclic linear model** ().

Today modern developed states (such as the USA, the EU countries, Japan, but also China, india, Singapore, Brazil a.s.o.) draw up alternative scenarios at social-economic and technological level, meant to anticipate the direction and tendency of the changes, with impact on the educational institutions and services. Certainly, we cannot omit the alerting conscience as to the unpredictable obstacles or effects in these areas. We can exemplify, in this context, several points in the USA strategy for the training of the youth as workforce (Johnston, Parker, 1993):

- Rebalancing of the economy development and the integration of the world's economies;
- Management of the disinflation – deflation cycles in the price policies;
- Competition and competitiveness in/on the work market between the traditional economic powers and the emergent powers, which have become big competitors;
- The dramatic burst of the new advanced technologies and their effects in information communication, artificial intelligence, informational storing and

processing, nanotechnologies, the dialogue in any language, robotics, manipulative biologies, biogenetic interactions.

### **Youth, education and continuous learning**

C. Ulrich, 2009, would rightfully ask, invoking the issues of learning: what are the results of learning; what is most important as a result of learning? The answers, slightly dubitably formulated, if we mention some other reputed authors as well, (see A. Coulon, 1997), would revolve, and are still revolving, around the following conduct values:

- too high concentration on the curriculum, the special perspective on the content indicating insufficient concern for "the changes which have a direct connection with life and with the development of identity, attitudes, values, systems of beliefs, behavioural dispositions, strategies of analysis and of action (9, p. 23);

- attraction for the answers to the question "what do the young people know?";
- insufficient interest in providing valid answers to two other questions: "who are the young people today?" and "what will the adults of tomorrow look like?";

- what are the dominant values/the table of values according to which we design, ever since we are in school and lecture halls in universities, the roles, statuses and competences of the people of tomorrow?

Ontologically speaking, the same author states: learning produces changes not only in terms of what the learner knows, but also in what the learner is, ... what new practices they have internalized, what positions they could occupy in the community (including in what the American specialists call „learning communities”, communities of practice, Wenger, 2002), what changes are taking place or could take place from the perspective of the self own identity.

In such a context, universities are interested in creating the favourable premises for the rational growth of investment in the human capital, the promotion of the image of excellence and professionalism in the space of the information society by the research development and innovation strategies, the drawing up and implementation of the European Qualifications Framework. We place here the accepted community strategy that is able to reflect the effectiveness, efficiency, transfer, transparency and recognition of qualifications and competencies at European level, to introduce quality standards in the evaluation of progress and results of professional learning (see also the activities of the ACPART organization).

A good practice we can invoke is represented by the strategy of the University of Bucharest (acronym UB), which, in a synthesis document concerning ensuring

quality, mentioned some generic ideas with a value of strategic objectives: the active insertion of the students in the professional domains they are studying for; extensions of collaboration between the faculty and the private work environment; the fast adaptation of the study programs to the new demands of the labour market; the increase of the students' visibility on the labour market, their monitoring and the development of studies during the practical training stage; the development of strategies for ensuring the presence of the mass media in view of increasing the indicators of quality, of transparency and visibility of the UB performances, by the informational channels and fluxes, of the online presence, of sites in flexible format, of the new informational technologies.

### REFERENCES

- Cummings, W. K., 2007., *Instituții de învățământ. Un studiu comparativ asupra dezvoltării învățământului în Germania, Franța, Anglia, SUA, Japonia, Rusia*. București: Editura Comunicare.ro.
- Duval, G. et Jacot, H., 2000, *Le travail dans la société de l'information*, Editions Liaison Paris.
- Giarini, O. și Malița, M., 2005, *Dubla spirală a învățării și a muncii*, Editura Comunicare.ro, București.
- Johnston, W. B. & Packer, A. H., 1993, *Workforce work and Workers for the Twenty first Century 2000*, Hudson Institute, Indianapolis.
- Neacșu I., 2009, *Învățământul – strategii sustenabile în integrarea socioprofesională a tinerilor*. Vol. *Tineret – Educație – Integrare*. Editura Universitară, București.
- Nica, D., 2001, „Uniunea europeană în era societății informaționale și a globalizării”, ([http://www.mdrl.ro/\\_documente/info\\_integrare/romania-si-viit-europei/informatizare](http://www.mdrl.ro/_documente/info_integrare/romania-si-viit-europei/informatizare), accesat 22.03.2010).
- \*\*\*, 2010, *Raport pentru asigurarea calității pentru anul universitar 2008-2009*, Universitatea din București, Editura Universității din București, București.
- Stoica M., 2000, „Premise ale trecerii la societatea informațională”, in *Revista Informatică Economică* nr. 4(16), pp. 42-46.
- Ulrich, C., 2009, „Identitate și interacțiuni sociale în experiența școlară”, in vol. V. Gheorghe (coord.). *Educația mileniului III*, Editura Omega, Buzău.
- Wenger, E., McDermott, R. & Snyder, W., 2002, *Cultivating communities of practice. A guide to managing knowledge*, Business School Press, Harvard.

## THE REFLECTION OF THE INFORMATICS SOCIETY REQUIREMENTS IN EDUCATION

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### *Abstract*

There is the need to understand which is the course and the dynamics of the development of modern society – in order for the education reform to succeed in what it has proposed: to modernise and to make efficient the didactic process, which should be finalised by an optimum preparation of the youth for their professional, cultural and social integration. Its tendency for dynamising and optimising at maximum the human activity, for modifying the connection between the creative activities and the routine ones especially imposed the introducing of the calculation electronic systems and equipments in all the fields. The informatics had a rapid quantitative and qualitative development. The huge networks, as the banking-financial ones, the Internet, the commercial ones with dozen of users who change information from all fields and in all directions transformed the planet into an “informational planetary village”. The school has a primordial role for the attenuation of the impact with the informatics field, for preparing the youth in the use of the computers and the knowledge of the field. We all are – even we mentally want to admit it or not- in an informational society where dominate the information, its stocking, processing, transmitting and managing. “Illiterate” in the third millenium has the significance of the lack of experience in informatics field. Our integration – at the individual level and at the national scale one- in the system that governs the world depends of what the generations – who attend and will attend our schools – will achieve in the informatics education.

*Keywords:* technology, cultural factors, research

“The 21-st century has seen launching in the same time the atom era, the space era, the electronics and informatics era, the modern biology era, the new materials era and that of the universe understanding”.

At the beginning of this century when the technological fever comprised most of the developed countries, we can call the first decade quite the *technological revolution decade in education*.

At the beginning of this article, concerning the way the education reflects the tomorrow’s society needs, there are to keep in mind the *common tendencies of the informatisation in the European countries*, enunciated at the European seminar “An European Platform for the Development of a Cooperation Mechanism in The

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Informational Technics Field in Education” – Moscow, 1991. [E. Noveanu, D. Noveanu, 1993]:

- the education systems regulates according to the suprasystem trying to answer to the necessities of the individual integration in an informatised society;
- the state decisively involved in the promotion of education informatisation; it has been aware of the education role in the society programme, but also the necessity of improving it faster, in order to assure to the respective society the competitive character in technologic and scientific perspective;
- the informatisation approaches comprise an extremely large area, stressing on the applications which assure a basic informatics culture for each graduate;
- it is assured a minimum technical equipping for the practical activities;
- it is assured the specific training of a sufficiently great body of teachers;
- it has been crystallized a coherent programme (programmes, projects) for the education informatisation;
- it is payed an increasing attention to the pedagogic, psychological, socio-pedagogic, economic investigations.

### **The Informatised Society**

#### 1. The civilization factors

The science is – paradoxically today – in a conflict with the society: admired and suspicioned in the same time, bearer of hopes for the future, but also a proposer of some ambiguous notions, generously financed and in the same time unable to keep all its promises, showing spectacular successes and in the same time accused of not serving directly the society objectives.

Nevertheless, *science and technology* are extremely powerful instruments today. Comparing science and technology, Gradwell's (1986) shows that:

Technology – is an opened system;

- it uses deductive reasons;
- it uses practical methods;
- it is preoccupied by what things should be;
- it has discoveries which lead to theories as a result.

Science – is a closed system;

- it uses analitical reasons;
- it uses scientific methods;
- it focuses on things that exist;
- it starts from problems and it is guided by theories. [James L. Barnes, 1988, p. 215]

To all of these is added the culture too, as “the main lever of the cultural

identity of a people, a fundamental instrument of the surviving and an inseparable factor of the economic and social development process; an instrument of learning and an impulse of change” [M. Malița]; the research and the education, completing this way the list of the civilisation factors. The unity of education with research and technology and their role in the development of science and culture are revealed by G. Secară in the scheme:

SCIENCE  
CULTURE – EDUCATION – RESEARCH

TECHNOLOGY

by culture understanding that factor, creator of spiritual values; by science- that factor, a theoretically provider of new knowledges concerning the world around us; by technology- a practical factor, a constructive of material objects one; by research- this methodological factor of the action led in the knowledge field; by education- that instructive-educative factor, a new human values provider, in order to continue and develop the civilisation. [G. Secară, 1986]

Trying an underlying of the relations between CULTURE – TECHNOLOGY – SCHOOL, Ray Page designs the following scheme starting from the nature of technology till the adoption of some strategies for the introduction of technology in school, depending on the characteristics of each culture.

<b>THE NATURE OF TECHNOLOGY</b>
<b>THE FUNCTIONS AND THE ROLE OF TECHNOLOGY IN SCHOOL</b>
<b>STRATEGIES FOR THE INTRODUCTION OF TECHNOLOGY IN SCHOOL CURRICULUM</b>

[Ray Page, 1988, p. 250]

The civilization development is based on the achievements of science and technology, achievements which determined and determine considerable mutations in education, research and culture and which it influence science and technology. The formative-educational system (the institutional organization of the school unities, instruction and professional training) under the impact of the new educational technologies will have different evolutions comparing with the current ones. The higher education confronts with the potential impact of the new electronics.

Information theory, quantical physics, genetics, molecular biology, micro analytical chemistry generate new knowledge, among them those of the

communication and information having the most important weight and with the greatest possibilities of using in school.

The new technologies produce meaningful changes in the other sectors, also (industry, agriculture, intellectual work, that of management); there are changes which mean the training in numerous other jobs, which request superior training specialists in other new fields, also, those able to master and improve the new technologies, to continue and develop the current surveys.

2. The elements of the society – new technologies connection

“The building site of the information highways was opened. The information revolution which consists in the capacity of producing, treating, stocking and using the informant rationally will make the difference between states.”[René Lefort in G. Văideanu, 1996] “The invested time in learning is one of the variables which explain the differences in efficiency among pupils, classes and nations” says G. Văideanu (1988).

The modernizing of the instructive-educative technologies must be achieved so that the efficiency of those which are taught to be enhanced, meaning the learning time saving, the getting thoroughly into the studied material and the stressing of the operational character.

In “Declaration” of the Stanford meeting (1986) the clear elements of the connection between society and the new technologies are underlined:

- the citizens must be trained in order to live in an informational society;
- in different countries it has been passed to a massive introduction of computers (and of informatics) in education; those who decide that in education must focus the attention on this very important field also;
- the researchers from different countries must unify their efforts in order to get results, applicable to an international level;
- the international organizations which operate in this field must develop these activities which facilitate the change of information and cooperation;
- all of these who have competencies in this field are invited to participate at the organization of such multinational research projects and of pilot-projects of multinational interest;
- the declaration is a message of the participants to this meeting addressed to the international community in order to support the continuation of the surveys concerning the use of computers in education. [E. Noveanu, D. Noveanu, 1993]

3. General trends that are basis of the introduction of NIT in school (politics and strategies)

The strategies and politics that are the basis of the introduction in school of the computer and of the informing technologies let to see some general tendencies:

- the informing technologies used as a pedagogic tool can have a powerful



influence on the way of assimilating the knowledge, on the learning content and the reports between disciplines, on the role of the educators and of the school and class organization;

- the decision of equipping just some pilot-schools or of proceeding to applications in the limited frame of a project or of a discipline is generally based on two series of connected considerations: those linked to the costs and those concerning the efficiency.

The best strategy would be the combination of the two ways of approaching; the state should support the introduction of informatics in all schools and in the same time, it should take the initiative of launching experiments in a restrictive number of well equipped schools, in order to establish the extent of effective contribution of informatics to the teaching-learning process (Japan, Sweden, some states from USA).

The action of introducing the computer in the school institutions was influenced in a great extent by factors which don't belong to the didactic world (these factors differ just by their relative weight from one country to another):

- economy demands – the reshape of the economic activity gives birth to a request of new competences, especially in the informatics field;

- industry interests – the introduction of informatics technology in education completes and gives an impulse to the national microelectronic industry development;

- commercial pressures – the producers encourage the informatics introduction in school in the frame of the commercial strategies, focusing on the increasing of the sales in factories and family;

- social pressures – often, the parents are the first ones who want to wish the use of the computer in school and the pupils come to school interested in informatics and with certain basic knowledge, gained in the family (especially for the primary school pupils);

- cultural factors – mass-media talks about the economic and social transformations- which directly or indirectly appear – connected of the informing technologies;

- political factors – the political leaders see in the informatics initiation programmes a good mean to be known in an obvious and concrete manner, by their intention of improving the educational system;

- the technological factors – the informatics progress extends its area of application and reduces the execution time and the costs.

Whatever the educational system structure would be, the role of the public forces is essential especially in the beginning stages of the informatisation (centralization/decentralization). The governments can act in five directions: on the

equipments, programmes, research activity, teachers that must benefit of a proper training, both before and its entire development.

The introduction of the computer in school is an innovation which ask for ideas and the oportunity of its putting into practice. Probably this creativity develops easier in a decentralised background.

The educational structures must be sufficiently supple in order to resist to the evolution of the society needs, to the integration of the new educational principles and to the aplication of some improved teaching-learning methods. It must be applied this principle of educational structures flexibility to the programmes of applying the new informational technology (NIT).

“The introduction of NIT in schools firstly should focus on the facilitation of learning in important disciplines. It is essential to apply the national strategies as pilot-projects, which can help to the identification of the problems and the decisions to be taken in order to execute some complete national programmes. NIT will continue to improve according to a model of “permanent change” (to take into account and to reflect the flexible infrastructures of administration and support; the flexibility of programmes, of examining methods, te evolutive character of the roe of the pupils needs).” [Recomendations at the Paris Congress, 1989, by E. Noveanu, D. Noveanu, 1993]

The informatics is called to be among the instruments able to improve the internal and external efficiency of the educational systems. It is concretised in this way more strategies for the future:

- the computer number increase offered to schools, teachers, pupils. It must be adopted flexible programmes where these machines will be systematically used as a subject matter and auxiliaries of gaining the programme’s discipline;
- the producing of a greater number of quality didactic logistics;
- training of a greater number of teachers, qualified to teach the pupils to use the computer. As long as the recently qualified in this field teachers won’t have an access to a sufficiently numberof computers and to a variety of logistics at reasonable prices, the computers will have a low impact on the educational programmes;
- measures which can allow teachers to devote more time NIT studies. In the systems where the syllabus are relatively uniform, it should be easy to introduce everywhere general programmes of initiation in the use of computers in education, allowing the teachers to devote the strictly needed time to know the way of introduction on a computer of the school activity, not being necessary to waste time redoing the programme. “As a consequence of analysing the computer in the 80’s education it is noticed that most of the countries applied a very simple diseminating strategy, starting from the hypothesis that the introduction of some informatics

material and logistics will automatically lead to a fundamental change of the way the pupils do their work class. The next stage consists – for the specialists in programmes field, for the textbooks’ authors, teachers, specialists in informing means and others – in the priority role given to the teachers as main agents of change promotion.” [W. Pelgrum, 1992]

### **Conclusions**

“A world of computer, as the tomorrow world will be, comes with its *uncountable* in front of minds. It gives them new relations, new meanings, but it wants to impose new languages.” (C. Noica) In order for the education reform to succeed in what it proposed – the modernisation and the making efficient of the didactic process, which lead at the end to an optimum training of youth for the professional, cultural and social integration – it must realise which is the course and the dynamics of development of the modern society. Its tendency of dynamising and maximum optimising of the human activity, of modifying the report between the creative and the routine activities especially imposed the insight in most of the fields of the equipments and counting electronic systems.

The informatics has known an exponentially quantitative and qualitative development. The occurrence of the faster and faster computers, of the different performant backgrounds of stocking and sending the information, of some new programming strategies determines as for the informatic field to be one of the top field in the modern society. Starting with the administrative and routine activities, continuing with fields like: industrial-economic, nuclear, aerospace, research ones, recreation activities, education, artistic creation, the computers came strongly and imposed as an ideal work partner. The huge networks, as the financial-banking ones, the Internet, the commercial networks with dozen of users who change information from all the fields and everywhere, transformed the planet into “a informational planetary village”.

The actual trend tries to integrate the computer in the daily life of people, by working activities, by recreation, informing, selfinstruction, economical administration by the connecting of the users at the informational highways. In this technological context, people’s life will transform according to everyone’s possibilities to evaluate in the global system. School has a primarily role for the attenuation of the impact with the informatic field, for preparing the youth in the use of the computers and in the field knowing (the synchronising of the disciplines syllabus – informatics; the setting of some informatics labs where to develop classes to almost all the didactics disciplines; the adaptation of the teacher’s staff to the new demands).

We are – even we want it or not from the mentally point of view – in an informational society, where information, stocking, processing, transmitting and managing of it are dominant. Being illiterate in the third millenium means lack of experience in the informatics field. Our integration on an individual plan and also, at the national level in the system governing the world, depends firstly by what the generations who pass and will pass through our schools will achieve.

### REFERENCES

- Barnes, J., 1988, “A Framework for Studying Technology”, in *Basic Principles of School Technology*, vol. 1.
- Bărbat, I., Pitariu, H., 1995, “Instruirea asistată de calculator: posibilități, realizări, limite, perspective”, in *Revista de pedagogie*, nr. 4.
- Cristea, V., 1981, Dumitru, P., *Dicționar de informatică*, Editura Științifică și Enciclopedică, București.
- Duguet, P., 1990, “Ordinatorul în școală. Strategii naționale și prelungiri internaționale”, in *Perspective*, nr. 2.
- Noveanu, E., 1994, “Informatizarea învățământului preuniversitar, problematica domeniului, direcții de dezvoltare, realizări”, in *Revista de pedagogie*, nr. 1-2.
- Noveanu, E., Noveanu, D., 1993, *Informatizarea învățământului preuniversitar, problematica domeniului, direcții de dezvoltare, realizări*, ISE, București.
- Page, R., 1988, “Technological Education in UK”, in *Basic Principles of School Technology*, vol. 1.
- Pelgrum, W., 1992, “Cercetarea internațională despre utilizarea calculatoarelor în învățământ”, in *Perspective*, nr. 3.
- Pelgrum, W., Plomp, T., 1991, *The Use of Computers in Education Worldwide*, Pergamon Press, New York.
- Petrescu, S., 1994, “Noile tehnologii informaționale în restructurarea învățământului”, in *Revista de pedagogie*, nr. 1-2.
- Secară, G., 1986, ”Implicații ale învățământului și tehnologiei modern”, in *Forum*, nr. 1.
- Stanciu, S., 1972, *Educație și tehnologie*, EDP, București.
- Trișcă, I., 1994, “Asupra procesului de abilitare a cadrelor didactice în manipularea informației”, in *Revista de pedagogie*, nr. 1-2.
- Văideanu, G., 1988, *Educația la frontiera dintre milenii*, EDP, București.
- Văideanu, G., 1996, *UNESCO - 50 Educație*, EDP, București.
- Vlăsceanu, L., Zamfir, C., 1993, *Dicționar de sociologie*, Editura Babel, București
- \*\*\*, *Dicționar de psihologie socială*, 1981, Editura Științifică și Enciclopedică, București
- \*\*\*, *Le petit Larousse*, 1995, Cedex, Paris.

## THE USE OF COMPUTER-BASED TECHNIQUES IN MODERN SPEECH THERAPY

IOLANDA TOBOLCEA<sup>1</sup>, ADINA KARNER-HUȚULEAC<sup>2</sup>

### *Abstract*

Research which took into consideration the evaluation of efficiency when introducing modern Information Technology in speech therapy (for English language) has pointed out the big potential and the important benefits, as well as the existence of some risks and disadvantages in the case of their exaggerated usage. Therapeutic software which are more frequently met and used represent sets of thematic exercises and teaching games which are interactive and transform the classical teaching material (posters, palatograms, etc.) into an exceptionally wide range of clinical electronic materials. At the same time, we also observe the existence of intelligent software (computer-based speech therapy), which can perform complex evaluations and diagnosis of patients with speech disorders, 3D graphics of the phono-articulator (voice box) and it is important in preparations, evaluation of pronunciation and executing an audiovisual feedback in real time.

*Keywords:* speech therapist, therapeutic software, computer-based speech therapy

Computer-assisted speech therapy became more and more frequent in school practice starting with the period 1990-2000, with the development of computer based technology applications in a didactic context, for children and adults with or without learning difficulties [Anderson-Inman *et al.*, 1996; Blankenship *et al.*, 2005; Boon *et al.*, 2006; Renard, 2000].

The following specialised software programs (for the English language) were developed in order to answer to the needs of specialists in the field of language pathology, which provides a wide range of attractive and stimulating formats, as well as didactic games for the vocabulary and the expressive and perceptive language development. The audio feedback completes the visual output, and the audio effects strengthen the impact of the animated visual rewards.

There are five main directions in using software programs within speech therapy.

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1. for the articulation of sounds and words, several graphic formats that operationalise visually the pronunciation characteristics of the patient and also the articulation duration errors are used. The vocal capture and the graphical display represent a feedback of maximum impact (Figure 1):

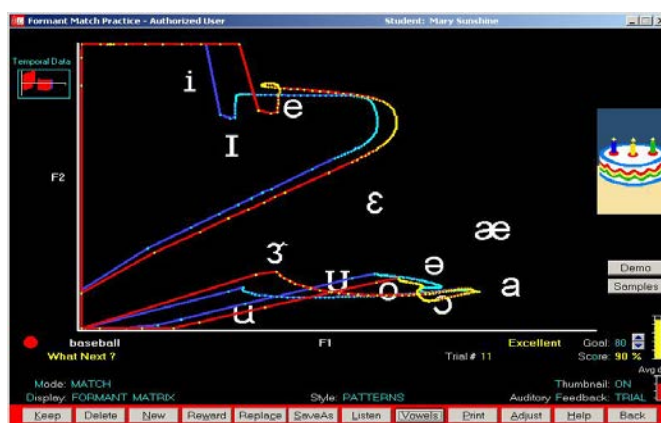


Figure 1: *Format for the articulation of sounds and words*

This graphical form is used in order to emphasize the differences and the similarities between the correct model and the child’s pronunciation and the practice until the two models correspond to an extent of at least 80%.

In order to eliminate the articulation duration errors, different formats are used (Figure 2); these formats include from a chronological point of view the pronunciation frequencies, providing thus a practical evaluation method for the pronunciation segments in the context of speech.

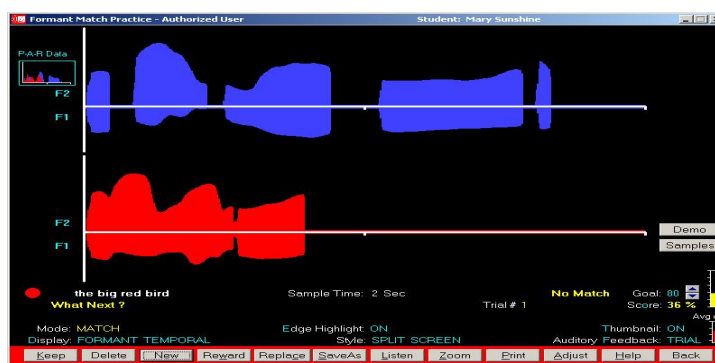


Figure 2 : *Graphical format for highlighting the articulation duration*

2. in order to gain awareness and to practice the voice volume, amplitude, intensity. In order to teach the patient what is the volume of his/her voice in a certain verbal production or in order to perform several volume modulations, one can use the Kaleidoscope (Figure 3), which functions on the basis of a colour pattern displayed on the monitor, directly related to the high or low sounds expressed by the child (measured in Hz).

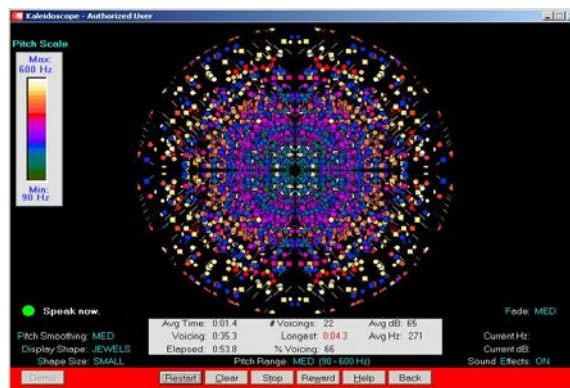


Figure 3: The Kaleidoscope – animated graphical format for highlighting the voice volume

In addition, the use of the computer in speech therapy is extremely important since it contributes to correcting some aspects of pronunciation, such as amplitude (Hz) (Figure 4):

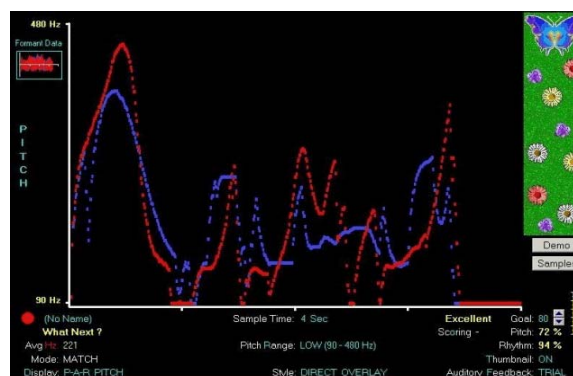


Figure 4: Graphical form of the pronunciation amplitude (Hz)

Another aspect related to pronunciation correction is the intensity, measured in decibels (Figure 5):

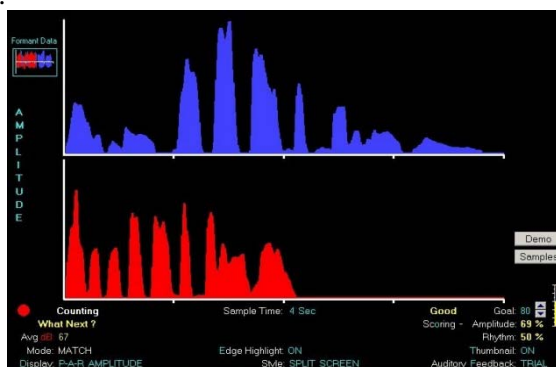


Figure 5: Graphical form of pronunciation intensity (dB)

Similarly, one can also observe graphically: the inflexion of words or sentences, changes in speech rhythm and fluency, continuous phonation, co-articulation of phonemes, natural and distorted vocalization etc.

3. Games and graphical images that stimulate the effort of the patient in improving his/her pronunciation. In order to stimulate the correct verbal productions of the child, pleasant images can be used, displayed progressively, according to the level of accomplishment of the objectives established by the teacher-speech therapist, and according to patient's disorders: the vocalisation duration, the continuous phonation or the pronunciation of certain sounds (Figure 6). Each pronunciation that corresponds to the correct model will be followed by the completion of an image segment. The hidden images are split in a variable number of parts, established by each speech therapist.



Figure 6: Hidden image for stimulating the pronunciation quality



4. The therapeutic software programs the most frequently met and used represent ensembles of thematic exercises and interactive didactic games that transform the classical didactic material (posters, palatograms, etc) into an extremely wide range of electronic clinical materials. For example, in vocabulary development, one can use didactic games (Figure 7) in which the patient is required to indicate the graphical representations associated to a name starting by a certain sound.

### What beginnings with Hh?



Figure 7: Interactive didactic-therapeutical game for vocabulary development

5. Ongoing evaluation can be presented quantitatively and/or graphically (Figure 8), obtaining a general image in the child's evolution throughout the speech therapy intervention, the rhythm of the positive pronunciation modifications; also, suggestions can be displayed for the modification of the types of exercises, the short or long term therapeutic objectives, the specific techniques, etc.

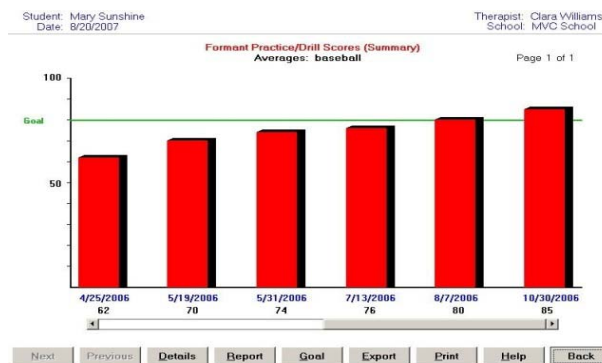


Figure 8: Graphical representation of the patient's evolution following the therapeutic intervention

In 1991, Cotton carried out a study in order to evaluate the effect of introducing computer-based technology in the speech therapy of disabled children. It was observed that the strongest effect was recorded in the children with learning disorders, in those with auditory disorders, language disorders or emotional disorders, which determined an orientation of the American governmental clinical research funds towards this field. It is noticeable that in Romania, just like in the USA, most speech therapists still use traditional speech therapy methods, that can be defined as a set of specific techniques, involving listening, imitation and the physical modelling of the phono-articulatory apparatus and many exercises that have to be practiced systematically [Secord 1989].

This therapeutic approach has undoubtedly the efficiency and the value demonstrated by the numerous children that improved or healed their language disorders, but any practitioner speech therapist can admit that this sustainable repetition technique for the correct pronunciation of sounds, syllables, words and sentences entails a decrease in the interest and motivation for practicing, since it involves a certain tiring monotony and regress.

This is precisely why a combination of the traditional techniques with the new informatics technology in speech therapy could lead to the stimulation of the child's motivation for systematic practicing, accelerating thus the therapeutic progress. Nevertheless, the computer is not a therapeutic means per se, being an educational tool that can be used in a great variety of forms in order to support numerous technological interventions necessary in language therapy [MacArthur and Malouf, 1991]. Other authors suggested that the new computer-based technology used for therapeutic purposes can help traditional speech therapy by creating an updated atmosphere in the therapy cabinet, that keeps up with the ludic and working realities of children in the 21th century; it can also improve the therapeutic relations, with a view to eliminate the frustration activated by the monotonous exercises suggested by the speech therapist, potentially leading indirectly to the increase in the children self-esteem [Miller și Marriner, 1986].

This is why numerous types of therapeutic software were created for the English language (Ortho-Logo-Paedia, Laureate Learning Systems, STAR System, AphasiaMate, CHAT, Chatback, Protrain, VideoVoice etc.), and also for the Romanian language (Ecofon, Logoped 1.0., SEBRAN 1.37, DISLEX-TEST, LOGOMON, TELPROT), which proved their efficiency in forming the correct pronunciation skills, in developing speech in general, in improving the affective life and in stimulating imagination.

It is important to point out the realization of the first intelligent software for the Romanian language (computer-based speech therapy), which can carry out complex evaluations and diagnose the patients, the 3D graphic of the phono-

articulatory apparatus, extremely important in the impostation stage, pronunciation evaluation and executing an audio-visual feedback real time. The creation of this software was carried out within an excellence project CEEEX (TERAPERS), in which collaborated the “Alexandru Ioan Cuza” University of Iași, the “Ștefan cel Mare” University of Suceava, and the “Gh. Asachi” University of Iași [Karner-Huțuleac *et al.*, 2008; Pentiuc *et al.*, 2008; Puzdriac *et al.*, 2008; Tobolcea, 2007; Tobolcea *et al.*, 2007, 2008, 2009; Zaharia *et al.*, 2008].

The objective was the realization of a system formed of the calculation system of the speech therapist and a mobile device, with a “friendly” and easy to use interface, by means of which the dyslalic child works both in the speech therapist cabinet and at home, in solving the exercises recommended by the speech therapist.

At the end of the project was implemented the Logomon computer-based therapy system (Fig.9), which includes classical modules such as the 3D articulation module, the management system for homework (installed on the child’s PC or PDA), the management system of the therapeutic tasks realized in the therapy cabinet, and also an expert system used in decision making related to the optimal therapeutic activities that should be followed for each dyslalic child (number of sessions, content of the therapeutic exercises, etc.). It is important to point out the fact that the decisive factor in the therapeutic process is the speech therapist. For each patient, the expert system can generate optimal sets of exercises, based on specific data (results in the tests used within the complex evaluation, affective and social cognitive parameters, etc.).

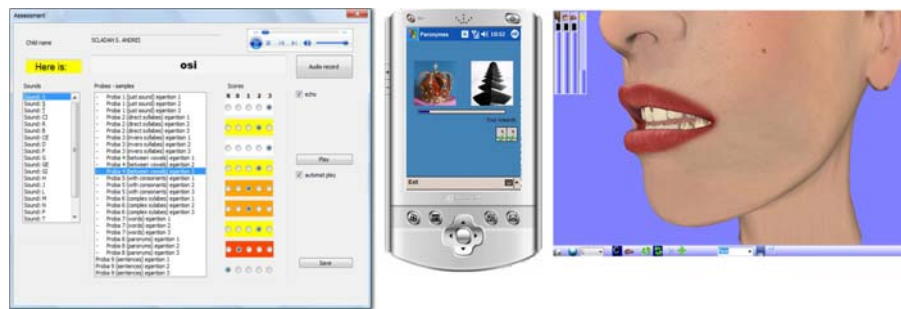


Figure 9: Computer assisted therapy system for dyslalia – Logomon

For the children with severe language disorders or with other associated disorders, for whom the compensation of speech disorders can only be made partially, one can use standardized software applications (for the English language) [Lahm and Nickels, 1999]. For example, the word processing systems allow the pupils with severe disabilities to monitor and correct the materials they

wish to write by using the keyboards. For these pupils, numerous software programs were created in order to check the spelling, the punctuation, the grammar, facilitating thus the development of the graphical abilities [Schetz and Dettmar, 2000]. Nevertheless, sometimes even this help is insufficient, since the pupil with severe disabilities has major problems in choosing the correct option from the options list displayed on the monitor for the words misspelled.

Another deficient ability in these children is the organization of their daily activities. Therefore, numerous programs for assisting the persons with learning disabilities also include computer-based applications for data management (*PDA*s), [Raskind, 1993], helping them in solving time management problems. It is obvious that for integrating these technologies at the level of the individualized educational programs, specialty training oriented towards the use of the computer and running these software applications is highly necessary.

As far as the assisting technology is concerned, a great variety of devices are used according to the specific disorder. For example, for children with vision deficiencies are used programs for the modification of the characteristics of the letters, or devices for synthesizing the artificial voice that transforms the graphical code into audio code, modified keyboards, etc.

All the researches that had in view the evaluation of the efficiency of the modern informatics means used in speech therapy (for the English and the Romanian language) unanimously emphasized the great potential and the important advantages they bring in the treatment of the children with speech disorders, with or without other associated disorders.

## BIBLIOGRAPHY

- Andeson-Inman, L., Knox-Quinn, C., Horney, M.A., 1996, "Computer based study strategies for students with learning disabilities: individual differences associated with adoption level", in *Journal of Learning Disabilities*, 29, pp. 461-485.
- Blankenship, T., Ayres, K., Langone, J., 2005, "Effects of computer based cognitive mapping on reading comprehension for student with emotional behaviour disorders", in *Journal of Special Education Technology*, 20, pp. 15-23.
- Boon, R.T., Fore, C., Burke, M.D., Hagan-Burk, S., 2006, *Students' attitudes and perceptions toward technology: What do the users have to say*, Council for Exceptional Children, Salt Lake City, UT.
- Cotton, K., 1991, *Computer-assisted instruction*, Northwest Regional Educational Library: School Improvement Research Series, 19.
- Karner-Huțuleac, A.-N., Tobolcea, I., Puzdriac, C., Zaharia, D., 2008, "Analiza sistemelor CBST (computer-based speech therapy) utilizate în cercetarea și practica logopedică a tulburărilor de vorbire (pentru limba engleză)", in Tobolcea, I. and Turliuc, M.-N. (Eds.), *Actualități și perspective în practica logopedică*, Sfera, Iași.

- Lahm, E.-A., Nickels, B.-L., 1999, "What do you know? Assistive technology competencies for special educators", in *Teaching Exceptional Children*, 32(1), 56-64.
- MacArthur, C.-A., Malouf, D.-B., 1991, "Teachers' beliefs, plans, and decisions about computer-based instruction", in *Journal of Special Education*, 25(1), pp 44-72.
- Miller, J.-F., Marriner, N., 1996, "Language intervention software: Myth or reality", in *Child Language Teaching Therapy*, 2(1), pp. 85-95.
- Pentiuc, S.-G., Schipor, O.-A., Danubianu, M., Schipor, D., 2008, *Therapy of Dyslalia Affecting Pre-Scholars*, Third European Conference on the Use of Modern Communication Technologies – ECUMICT 2008, Gent, Belgium.
- Puzdriac, C., Tobolcea, I., Karner-Huțuleac, A.-N., Zaharia, D., 2008, "Implementarea mijloacelor moderne in terapia logopedica a tulburarilor de limbaj", in Tobolcea, I. and Turliuc, M.-N. (Eds.), *Actualități și perspective în practica logopedică*, Sfera, Iași.
- Raskind, M., 1993, "Assistive technology and adults with learning disabilities: A blueprint for exploration and advancement", *Learning Disability Quarterly*, 16, pp 185-198.
- Renard, L., 2000, "Cut and paste 101 : Plagiarism and the net", *Educational Leadership*, 57(4), pp. 38-43.
- Schetz, K.F., Dettmar, E., 2000, "Collaborating with technology for at-risk readers", *Teaching Exceptional Children*, 32(4), pp. 22-27.
- Secord, W.A., 1989, "The traditional approach to treatment", în V. Knight, (Ed.), *Assessment and Remediation of Articulatory and Phonological Disorders*. Second Edition, pp. 129-153, NY: Macmillan Publishing Company, New York.
- Tobolcea, I., 2007, "Sisteme informatice pentru asistarea logopedului în stabilirea terapiei personalizate a tulburărilor de limbaj", *Sisteme distribuite*, Universității, Suceava.
- Tobolcea, I., Karner-Hutuleac, A.-N., Puzdriac, C., Zaharia, D., 2007, "Terapers - sistem informatic pentru terapia logopedică personalizată a tulburărilor de pronunție", in vol. Congresului Internațional de Psihologie *Cercetarea psihologică modernă: direcții și perspective*, Sibiu.
- Tobolcea, I., Pentiuc, S.-G., Karner-Huțuleac, A.-N., Puzdriac, C., Zaharia, D., 2008, "Transpunerea programelor logopedice clasice în pseudocod algoritmicizat", in Tobolcea, I. and Turliuc, M.-N. (Eds.), *Actualități și perspective în practica logopedică*, Sfera, Iași.
- Tobolcea, I., Pentiuc, S.-G., Danubianu, M., 2009, "Folosirea tehnologiei informației și comunicării în procesul de învățare a copiilor cu cerințe educaționale special", in *Sisteme distribuite*, pp.105-109, Editura Universității, Suceava.
- Zaharia, D., Tobolcea, I., Karner-Huțuleac, A.-N., Puzdriac, C., 2008, "Percepția impactului mijloacelor multimedia din terapia logopedică în rândul părinților, educatorilor și logopezilor", in Tobolcea, I. and Turliuc, M.-N. (Eds.) *Actualități și perspective în practica logopedică*, Sfera, Iași.

## NIT AND CAREER COUNSELING

ANCA ANDRONIC<sup>1</sup>, RĂZVAN-LUCIAN ANDRONIC<sup>2</sup>

### *Abstract*

More and more, NIT play a significant role in career counseling, as a genuine instrument of information, a vast electronic library or a complex means of assessment. This is what counseling, assisted by NIT represents in most European countries. But what is available under electronic forms, in most cases, is based on what was already available as software packages and pencil-paper tests. The image of NIT in counseling is fragmented, and so far, at the national level there isn't any uniform development in this area. However, a constructivist approach and new ways of learning, together with NIT, open new possibilities of computer use in career counseling and one of the most important is a persistent and flexible assistance given to any person in its development throughout life. This article aims to describe new dimensions and implications of NIT in education, mentoring and career counseling.

*Keywords:* counseling, NIT, career

### **The current background**

Counseling services and career guidance have evolved significantly in the industrial, post-industrial and information society from several points of view – in what concerns the organization, methods, structure, policies and practices, considered human resources and available occupational structures. Moreover, educational and vocational counseling and guidance supports the individuals to build their own careers and thereby, helps in conceiving an optimal path in life. Currently, career counseling must meet the following categories of new situations and challenges: the globalization of the labor market, the extend of market economy in most of world's countries, organizational transformation of the workplace, the growing importance of knowledge, communication skills – not only verbal ones, but also the use of NTI, progressive learning, demographic growth and

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rising unemployment, the implementation of the policy of women emancipation, migration and border mobility for labor, and recently, the implementation of new government policies regarding the overcoming of the current crisis. These issues have already made considerable changes considering the expectations, micro and macro structures, and the task of counseling and vocational guidance is to properly appreciate the impact, to understand the phenomena in progress and to support individuals as they adapt to new challenges.

Therefore, under the aforementioned factors and the directions stipulated by the EU Council between 2003 and 2004 on strengthening policies, systems and counseling practices throughout life in Europe, it is emphasized the need of putting the individual in the center of counseling services. The key recommendation is the absolute need to facilitate access to career guidance services and continuous improvement of their quality. Given that in Romania there is an important increase in the use of NIT, it can significantly facilitate this effort. Most of the specific content of counseling and career guidance can be operationalized by using advanced information technologies. Thus, the main challenges to be responded to by any system of career counseling are switching the focus from the direct assistance of school or professional decision, to the development of the individuals' ability to manage their own careers, and finding inexpensive ways to broaden access to counseling services for the beneficiaries (according to the reports compiled by the World Bank and the European Training Foundation) [Laroche et al., 2006].

### **The use of NIT in career counseling**

Using the new information technologies in career counseling is dependent on technological developments in Informatics (computers with large mnemonic possibilities and therefore, able to maintain large databases, the development of information storage on CD-ROM industry, of multimedia systems, networking computers via Internet). In 1998 Offer [Jigău, 2001, pp. 285-286] made a classification of types of software used in career counseling: games and simulation programs (designed to be used as *commercial games*, for training in vocational schools with educational themes related to career); programs for "correspondence" for search and "choice" from a list of jobs of the "appropriate one" for a client according to his characteristics, personal profiles obtained through self-evaluation; programs that "accomplish" a psychological profile based on questionnaires; programs for searching information: programs for (re)finding stored data, by certain criteria, within database of different sizes and complexity, programs for providing information in order to increase awareness regarding certain opportunities; information programs regarding the network of schools and

educational institutions and vocational training; programs to support decision making; programs which help individuals to analyze the factors that influence or to be taken into account in making a decision, also “proposing” ways or options to be taken; programs to support the development of a curriculum vitae, writing a letter of presentation or filling standard forms; programs for the development of skills search for jobs; cross-curricular applications; psychometric tests for measuring certain skills, personality tests, etc; multimedia systems: complex programs incorporating several types of data (sound, image, text). Currently, the situation is different: due to the expansion of the Internet – it covers the whole world, it has the possibility of unlimited, permanent extending, and has a great potential for everything pertaining to human communication, information, documentation etc. [Lemeni and Miclea, 2004, p. 108], many of the aforementioned computer products are now available to a wider public. Some of the research findings undertaken by us in Brasov county on career counseling – impact on educational actors – come to support the above.

### Comparative study

The research was undertaken in Brasov, on a number of 1223 persons: 358 eighth grade students, 258 high school students (18-19 years old), 370 adults (parents of the children enrolled in the research), 172 class masters of the eighth and the twelfth grade and 65 school counselors. One of the items with pre-coded response in the survey applied to the target groups aimed at identifying sources called upon by the respondents to inform themselves regarding career counseling and guidance.

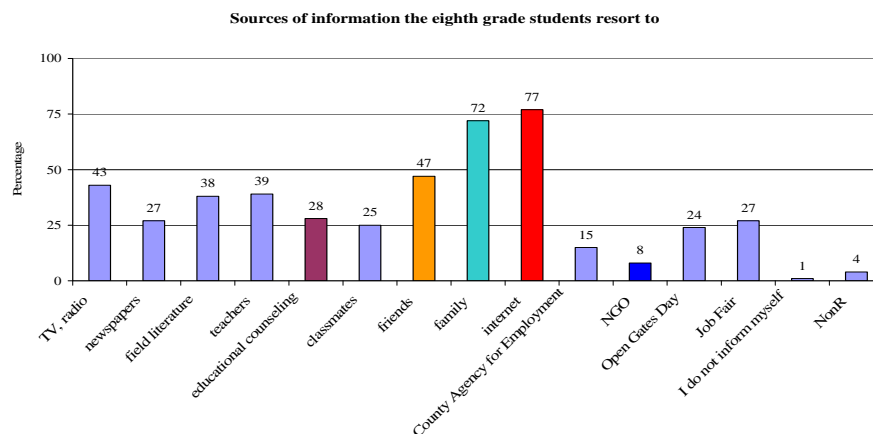


Figure 1. Histogram representing the sources to which the eighth grade students



*resort to learn about careers*

Figure 1 represents the choices made by eighth grade students and highlights the preference for the Internet (77%), which is explained by the ease, speed and diversity of information that can be accessed by computer. The family ranks second (72%), and third- friends (47%). The NGOs in the field rank last, although in Brasov county, this sector is well represented, we find that the information does not properly reach the target audience. 38% of the respondents say that they read the field literature and 28% of the children say they resort to the school counselor's office to inform themselves.

In the responses of young people between 18-19 years old was revealed the same ranking of given alternatives: first is preference for internet (78%), the family ranks second (53%), and friends, third (48%). Only 17% say that they appeal to the school counselor's office for information in the field, and the field NGOs rank last (9%). From the analysis of the sources that the parent resorts to during this period in order to obtain information on career orientation (Figure 2), the Internet is the third, in percentage of 48.33%. The family has a percentage of 76.66%, and teachers – 50% of the respondents, the remaining percentage being equally split between the other sources.

Sources of information the parents resort to regarding career counseling  
(values expressed in percentage)

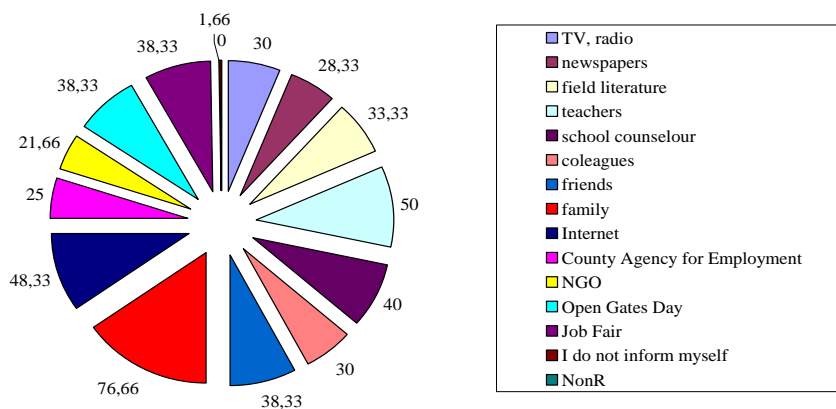
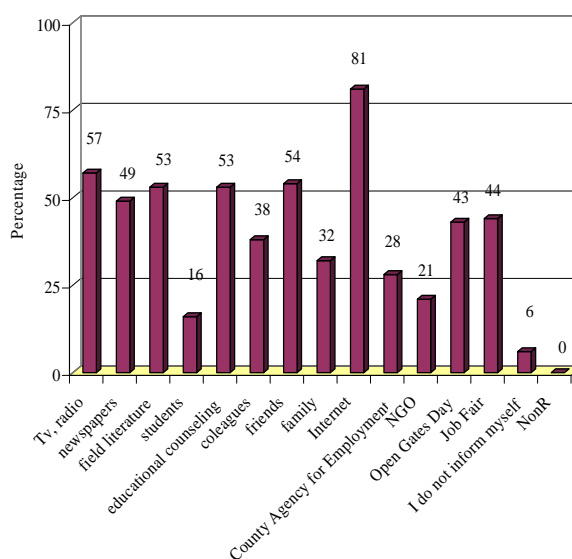


Figure 2. Structure circle representing the information sources the parents resort to on career counseling

Regarding the sources the class masters resort to (Figure 3) in order to learn more about career counseling and guidance, the internet ranks the first (81%), and

then the information provided by television, radio (57%) and friends (54%). More than half of the teachers resort to field literature and to the support of school counselors and 43 - 44% of the respondents participate to job fairs and to other events organized by various educational institutions for promoting educational

Sources the class masters resort to on career counseling and guidance



offers.

Figure 3. Histogram representing sources that class masters of eighth and twelfth grades resort to on career counselling

Regarding the choices made by counselors from Brasov, a percentage of 79% of the respondents stated that they resort to the field literature, about half of them use the Internet and 33% inform themselves within the meetings with their colleagues, through trainings and Masters in the field. Note that the information is obtained through informal channels and so is the personal effort to inform oneself (using the skills of NIT).

Information sources the school counselors resort to on career counseling

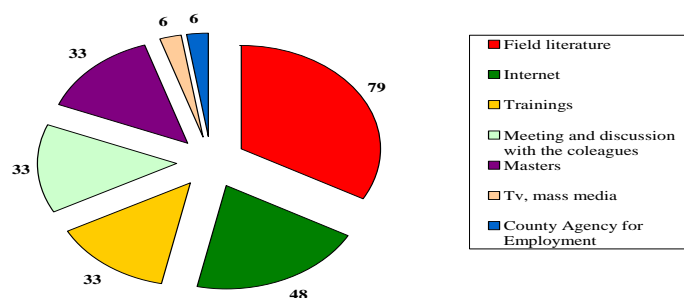


Figure 4. Structure circle representing the information sources the counselors resort to on career counseling

### Conclusions and perspectives

More and more, NIT play a significant role in career counseling, as a genuine instrument of information, a vast electronic library or a complex means of assessment. This is what counseling, assisted by NIT represents in most European countries. But what is available under electronic forms, in most cases, is based on what was already available as software packages and pencil-paper tests. The image of NIT in counseling is fragmented, and so far, at the national level there isn't any uniform development in this area. However, a constructivist approach and new ways of learning, together with NIT, open new possibilities of computer use in career counseling and one of the most important is a persistent and flexible assistance given to any person in its development throughout life.

### BIBLIOGRAPHY

- Jigău, M., 2001, *Consilierea carierei*, Editura Sigma, București.  
 Jigău, M., (coord.), 2002, *Tehnologiile informatice și de comunicare în consilierea carierei*, Institutul de Științe ale Educației, București.  
 LaRoche, M., Botnariuc, P. Muscă, A. Tăsică, L și Țibu, S., 2006, *Analiza nevoilor de consiliere pe toată durata vieții*. Institutul de Științe ale Educației, București.  
 Lemeni, G. și Miclea, M., (coord.), 2004, *Consiliere și orientare. Ghid de educație pentru carieră*, Editura ASCR, Cluj-Napoca

## DEVELOPING SKILLS FOR ADULTS IN AN INFORMATION SOCIETY

MAGDA-ELENA SAMOILĂ<sup>1</sup>, MIRELA DRACINSCHI<sup>2</sup>

*Every citizen must be equipped with the skills needed to live and work in this new information society. (The Lisbon European Council, March, 2000)*

### *Abstract.*

The object of this paper is to prove the necessity of approaching the educational process from the perspective of the development/improvement of key and transverse skills. The possibility of transferring these skills to the most varied areas, of accomplishing adaptation, finally determines integration. Empowering people through the acquisition of new skills to enable the current and future workforce to adapt to new conditions and potential career shift will reduce unemployment and raise labor productivity. The development and the improvement of both basic and cross-curricular skills represent the requisites for the professional integration of adult persons. In the same time, the transfer of know-how and the adjustment to the requirements of modern-day life by achieving a concrete compatibility of the skill supply with the labor market demand are the aspects on which adult educational and training systems should focus.

*Key concepts:* lifelong learning, basic skills, cross-curricular skills, compatibility of the skill supply with the labor market demand

In a time characterized by accelerated changes on the labor market, centering educational endeavors on developing competences, on the personalized approach of learning, on developing strong relations between formal education and professional environments represents aspects which may lead to adaptability and the facilitation of professional integration, if they are cumulated. Globalization, the aging of populations, urbanization and the evolution of social structures are characteristics of the contemporary society that demonstrate more conspicuously that sequential endeavors no longer prove its utility, the unitary, holistic approach representing the long term solution.

In order to deal with the impact of the crisis on job occupation and to improve employment perspectives, it is essential to monitor, evaluate and anticipate the

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competences of the adult population, as well as to calculate a realistic compatibility between the demand on the labor market and the educational systems' offer.

**European initiatives regarding the calculation of the compatibility between the competences offer and demand to the purpose of obtaining professional integration**

The European community (Communication of the European Commission, 2008, p. 12) defines eight key competences, necessary for personal fulfillment, the development of active citizenship, social inclusion and professional insertion, in a society based on knowledge:

- communication in the mother tongue
- communication in foreign languages
- mathematical competence and basic competences in science and technology
- digital competence
- learning to learn
- social and civic competences
- sense of initiative and entrepreneurship
- cultural awareness and expression

A common language is trying to be adopted at community level in order to establish a relation between the education field and the labor field. This connection will facilitate the employees and employers understanding of the way in which the results of learning, operational in terms of key competences, are relevant for specific tasks and occupations.

Transversal competences become more and more important and explicit. The capacity to organize and manage, to relate, to communicate within the most various contexts, aspects such as critical thinking in using new technologies and mass communication means, awareness of risks, ethical and juridical considerations, are transversal competences whose educational approach becomes more and more necessary.

Ensuring realistic opportunities for accumulating practical experience, for coming directly into contact with the professional life, should represent major objectives of the adult training systems. To this purpose, learning at the work place, stages and action programs based on volunteers represent real solutions that allow the calculation of compatibility between competences demands and offers. Learning is not a mechanical process of accumulating knowledge, that can be measured in quantity, led by the principle *the more, the better*. Actually, "it represents a process structurally determined by the attributing of meanings, an opening to new possibilities and alternatives" [Siebert, 2001, p. 47].

In March 2010, the European Commission issued the communication “Europe 2020, A European strategy for an intelligent, ecological and inclusion favorable growth”. The document establishes three priorities, which support each other:

- accomplishing an intelligent development: economy based on knowledge and innovation;
- accomplishing a long-lasting development: promoting a stronger economy from the point of view of resource usage, more ecological and more competitive;
- accomplishing a development favorable to inclusion: promoting an economy with a high rate of labor occupation, in order to ensure social and territorial cohesion.

By ascribing directly to these priorities, seven initiatives are established with the purpose of stimulating progress within each theme. The initiative “An agenda for new competences and new job offers” has as objective the creation of the conditions necessary for modernizing the labor markets, for increasing the occupation level and for ensuring sustainability of authentic social models.

In this sense, “the occupation rate for the population aged between 20 and 64 should increase from the present level of 69% to at least 75%, including by a greater involvement of women, of older workers and through a better integration of migrants on the labor market” [Communication of the European Commission 2010, p. 13].

Thus, it is preferable that education and adult professional training cover the entire range of key competences. Centering exclusively on individual competences, such as alphabetization or professional abilities, represents partial interventions, which do not allow the possibility of transfer. At the same time, the accessibility of training systems, the openings for all categories of adults, no matter the age, level of qualification or learning particularities, are exigencies that, if followed, contribute to ensuring equality in opportunities.

Recent studies have pointed out the fact that low qualified adults are seven times less susceptible to taking part in learning programs throughout their life, compared to those with a high level of training [CEDEFOP, 2008]. These realities determine the arising of inequities in education – “*the Matthew effect* – individuals with the highest level of initial education present a higher probability of continuing their studies, whereas persons with a lower level of competences face difficulties in the stage of frequenting a training program” [OECD, 2003, p. 116]. This is one of the reasons for which educational systems have the obligation to become more open and relevant, even more so because “the gap between the level of competences and job demands is foreseen to grow by the year 2020” [Communication of the European Commission, 2009, p. 15].

The personalized approach of learning, the development of strong relations between formal education and the professional environments, the development of learning at the work place are aspects that lead to the development and improvement of adults' competences, if they are cumulated.

### **The analysis of the adult educational system in Romania, with reference to Lisbon indicators**

In the Lisbon Agenda, The European Union established five indicators that demonstrate the extent to which a country is able to integrate in the economy of knowledge. Romania's position emphasizes our country's ability to become a competitive society, at community level (Figure 1).

LISBON INDICATORS	ROMANIA	PRESENT UE	TARGET UE 2020
Prematurely abandoning the education system	23,6%	14,9%	Max. 10 %
The average of 22year-olds who have graduated at least high school	66,5%	77,3%	Min. 85%
The average of 15 year-old students who cannot reach even the lowest level of performance (PISA 2001)	41%	19,4%	15%
The average of graduates in mathematics, science and technology	23%	24,1%	+ 10%
Adults' participation to permanent education	1,6%	10,8%	12,5%

Figure 1. *Report on the status of the national education system*

Source: Ministry of Education and Research, 2005

According to this report, Romania occupies the last place in Europe regarding the participation of youngsters between 15-24 years to some form of education. Only 41.9% of these participate in a form of education (compared to Lithuania – 64.5%, Poland – 63.4%, Slovenia – 62.7%). This fact has real consequences on the level of labor force, demonstrating weak training, for daily activities, with a low qualification level, gapped from the demands of an economy based on knowledge, innovation, and research. On the other hand, the tendencies identified in the

European Union's documents, in terms of occupation, bring out a great demand for jobs that require intellectual activities, of high qualification (Figure 2).

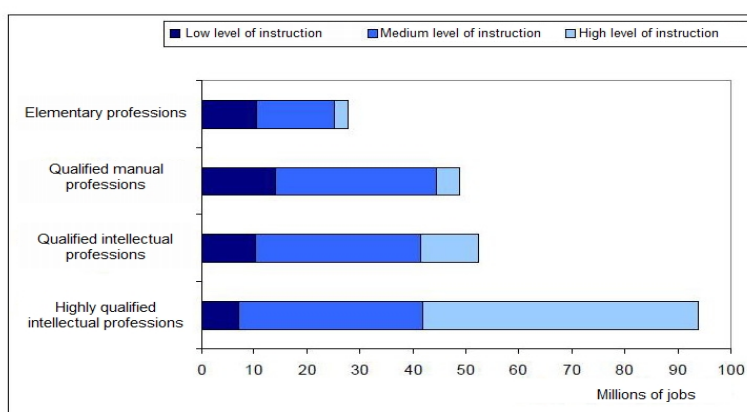


Figure 2. *Jobs design in 2020, depending on the most important professional categories and the training level in the European Union*

Source: CEDEFOP, 2008

With respect to technologies taking over tasks, it is obvious that they will not be able to substitute “unusual” occupations, specific to highly qualified professions (cognitive or communication tasks), nor to weakly qualified professions. On the other hand, “usual” occupations, which require a medium qualification level and repetitive activities, will be automatic, informational or externalized.

### **Tendencies in approaching educational endeavors from the perspective of learning and evaluation based on competences**

Starting from the variety of learning situations, the continuous educational paradigm takes into consideration the necessity of accomplishing educational endeavors by referring to various aspects: formal, non-formal and informal. Although non-formal and informal education does not directly determine the obtaining of a qualification, at the level of European Union politics there is an ever clearer tendency in acknowledging acquired knowledge, abilities and competences, by identifying, acknowledging, accrediting and certifying the results of learning, no matter the time, place or means through which they have been obtained.

Emphasis on acknowledging non-formal and informal learning is not an element of novelty. In 1995, the European White Chart established the fact that acknowledging competences, no matter how they were acquired, represents the essential component in accomplishing professional integration and autonomy. By



acknowledging and formal validating previous learning, adults' competences become available to various interested factors, including employers. Acknowledgement reduces costs, by eliminating the need to allocate resources to teach what has already been taught before.

There are different ways of acknowledging acquired learning in contexts outside formal education, from relatively direct and less costing ones to the most complex. Competences' examinations, developed in a growing number of countries, are situated at the less complicated end of this specter. "At the more complex end we find the *proof portfolio* of the one soliciting the acknowledgement of his fields and levels of expertise" [Eurybase, 2007, p. 34].

OECD member countries have elaborated unitary, standardized programs for youngsters and adults' evaluation, to the purpose of measuring the level in which competences are applicable in concrete contexts: PISA (*Programme for International Student Assessment*), AHELO (*Assessment of Higher Education Learning Outcomes*), PIAAC (*Programme for the International Assessment of Adult Competencies*).

Also, there is an inclination towards the development of certain operational instruments common for education, training and work, by creating an European frame for competences and professions. In this sense, there is the intention of creating ESCO (*European Skills, Competencies and Occupations Taxonomy*), instrument for anticipating needs in terms of competences, which needs to be updated permanently, depending on the demands of the labor market.

At the same time, the experience of countries already using complementary methodologies for measuring progress, such as competences portfolios, individual plans, and project based evaluations should be analyzed and used as a resource in national programs. Under the incidence of the evaluation process do not come only assimilated information, but also the attitudes, the abilities acquired after frequenting a training course.

On the other hand, making the curricula more flexible through educational programs based on developing competences, approaching evaluation methodologies *inter pares*, *inter alia*, using educational portfolios as means of appreciating progress in learning and, not ultimately, through stimulating schools, educational consorts and universities to take up the role of adults' permanent educational centers represents requirements included in the present education law, in agreement with tendencies registered at community level (Document of the Presidential Commission for Analyzing and Elaborating Educational Politics, 2009).

Applying the principles of continuous learning (in cooperation with relevant social partners), approaching flexible educational courses between various fields,

educational levels and training, increasing the attractiveness of education and professional training are aspects that will allow the securing of professional directions.

### **Curricula digitalization, demand for adult integration in an information society**

The initiative “An electronic agenda for Europe” has as objective the acquiring of lasting social and economical benefits, through access to an unique digital market, based on fast and ultra fast internet, “on inter operable applications that will allow broad band general access to all services by 2013, and to internet of much greater speed (30 Mbps), by 2020” [The European Commission, 2010, p. 34].

Creating such a market, with online content and services, benefiting from a high level of security and promoting internet access through actions of supporting digital competences represent premises which will favor the acquiring of professional autonomy, information and communication technologies having the role of extending adults’ access to the most various learning opportunities.

*Blended learning* (learning from a diversity of fields) allows the combination of the interaction *face to face* with the technology mediated interactions: *iPhones*, *Satellite television channels*, video conferences systems, etc. Using *e-Learning* and *m-Learning* at the same time (learning through portable technologies , laptops, MP3 players, electronic note books, mobile phones), *blended learning (hybrid courses)* offers to the participants to the educational act the possibility to interact simultaneously from various physical spaces – “to be both together and apart” [Garrison, D. R., Kanuka, H, 2004, p. 97].

*Ubiquitous learning (u-learning)* favors the direct adult implication to the specific educational endeavor. The influences are permanent, no matter the degree to which the participants become aware of them. The *u-learning* environments have the following characteristics [Weiser, Mark, Rich, 1999, p. 38].

**Permanence:** the entire learning process is taped, so we have the possibility of subsequent visualization of all the stages that have led to the results obtained.

**Accessibility:** the participants have access to their own documents, products, results of the learning process, from anywhere, involvement being permanent.

**Promptness:** the participants obtain feed-back, problems being solved in due time.

**Interactivity:** the participants have the possibility to interact with experts, professors, through synchronous or asynchronous communication, having permanent experts’ and information availability.

Situational learning contexts: the participants learn in usual contexts, of day to day life. The problems that arise are consequences of daily, authentic, natural interactions.

Adaptability: the participants have the possibility to access information, depending on their own interests and learning characteristics.

Moving the access from linear learning to hypermedia learning, moving from instruction to construction and discovery, from memorizing content to selection, from learning within the school to permanent learning, from the teacher – transmitter model to the teacher – mediator model are characteristics of the new educational paradigms within which information and communication technologies fulfill the most complex functions. And “comparative analyses” (Airinei, D., 2003, p. 195), from this perspective, may continue.

	Traditional Education	NTIC Based Education
1.	Books, textbooks, lectures notes, reading notes	Portals and online resources
2.	Chalk, lectures held by professors	Multimedia labs, interaction
3.	Passive acquisition of information	Individual, active exploration of information
4.	Individual study	Team study
5.	Homogeneity	Diversity
6.	Pre-established contents	Dynamic, interactive contents
7.	All-knowing educators	Guiding educators
8.	Discussions in class	Online collaboration
9.	Consultations after classes	WEB tutorials available on request
10.	Lecture room	Multiple locations
11.	Periodic examinations Limited	Online evaluation system
12.	Limited number of students	Adaptation to students' requirements

Figure 3. *A Comparison between Traditional Education and NTIC Based Education*

Paradoxically, learning mediated by technologies of information and communication represents the problem and, at the same time, the solution for permanent education. The excess of information, the lack of private space, the security problems, the addictive behaviors are just a few of the problems that the new learning environments generate.

However, on the other hand, major changes determined by introducing these technologies in the field of education cannot be ignored, computers playing an essential role in the exponential growth of the informational volume. In order to deal with the dynamics of the cognitive society, certain adaptations, permanent revisions of competences represent conditions without which integration and autonomy become problematic. And, in this process of permanent adjustment, technology seems to be the binder that will not prove its efficiency without awareness in mediation.

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## REFERENCES

- Airinei, D., Maxim, E., Cocriș, V., Ișan, V., 2003, „The impact of new information technology on the education offer quality”, în *Analele științifice ale Universității Alexandru Ioan Cuza, Științe Economice*, Tomul XLVIII-XLIX, p. 194.
- CEDEFOP, *Skill needs in Europe, Focus on 2020*, Luxemburg, 2008.
- Comunicarea Comisiei Europene, 2008, *Noi competențe pentru noi locuri de muncă: Să anticipăm și să răspundem cerințelor pieței forței de muncă în materie de competențe*, Bruxelles.
- Comunicarea Comisiei Europene, 2009, *Competențe cheie pentru o lume în curs de schimbare*, Bruxelles.
- Comunicarea Comisiei Europene, 2010, *Europa 2020, O strategie europeană pentru o creștere inteligentă, ecologică și favorabilă incluziunii*, Bruxelles.
- Comisia Prezidențială pentru Analiza și Elaborarea Politicilor din domeniile Educației, 2009, *Educație și cercetare pentru societatea cunoașterii*, București
- Garrison, D. R., H. Kanuka, 2004, „Blended learning: Uncovering its transformative potential in higher education”, *The Internet and Higher Education* 7 (2), pp. 95–105.
- OECD, 2003, *Beyond rhetoric: Adult learning policies and practices*, Paris.
- Weiser, Mark, Rich, 1999, „The origins of ubiquitous computing research at PARC in the late 1980s”, *IBM Systems Journal*, p. 38.
- Siebert, H. , 2001, *Pedagogie constructivistă*, Institutul European, Iași.
- UNESCO, 2002, *Information and Communication Technology in Education. A curriculum for schools and programme of teacher development*, Paris
- [http://ec.europa.eu/information\\_society/index\\_en.htm](http://ec.europa.eu/information_society/index_en.htm)
- [http://ec.europa.eu/information\\_society/eeurope/i2010/index\\_en.htm](http://ec.europa.eu/information_society/eeurope/i2010/index_en.htm)



## **EDUCATION & COMPETITIVENESS ON LABOR MARKET DEVELOPING NEW SKILLS WITH VISUALBUILDER**

CRISTINA CHELARU<sup>1</sup>

### *Abstract*

In a dynamic world in which “today” differs to a large extent from “yesterday” and in which organizations are living organisms trying to adapt, develop and become more and more competitive each day, the place and role of the employee is also going through dramatic changes. We will try to emphasize the need for adaptability, flexibility and new computer skills within nowadays labor force’s environment. As ITC is changing organizational structures it also impacts its members’ work behavior. Using a computer is not the same it used to be. Basic computer assisted tasks today may comprise activities based for example on using simple programming languages. We will present VisualBuilder, a tool by which such a task can become really easy for an employee, whether or not he has an IT qualification. We will show it is possible by using visual programming instead of text programming languages. This is all about employee’s competitiveness. And it is possible through continuous education.

*Keywords:* labor force, skills, competitiveness, efficiency, visual programming

### **Introduction**

Motto: “In the New Economy, knowledge, rather than natural resources, is the raw material of business”. [Center for Regional Studies, USA 2002].

In an economy driven by innovation and knowledge, in marketplaces engaged in intense competition and constant renewal, in a world of tremendous opportunities and risks, in a society facing complex business, political, scientific, technological, health and environmental challenges, and in diverse workplaces and communities that hinge on collaborative relationships and social networking, the ingenuity, agility and skills of people are crucial. Creating a 21<sup>st</sup> century public education system that prepares students, workers and citizens to triumph in the global skills race is the central economic competitiveness issue every nation aims for the next decade.

Over the last several decades, the industrial economy based on manufacturing has shifted to a service economy driven by information and innovation. All

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developed countries have made this shift to information products and services. Jobs also have shifted from manufacturing to services, particularly in higher paid information services. “Economic success is increasingly based on the effective utilization of intangible assets, such as knowledge, skills, and innovative potential, as the key resource for competitive advantage.”

Companies also have changed how they are organized and the way they do business. Workers have now more responsibility and contribute more to productivity and innovation.

Economic development practitioners throughout the world have struggled with defining the specific skills available in their labor force. Educational coverage among populations living in poverty is inadequate and of poor quality, and this has negative consequences in terms of young people's labor competencies. Significant firm-level productivity increases when associated with changes in business practices, including reengineering, regular employee meetings, self-managed teams, up skilling of workers and computer use by front-line workers. An essential positive relationship in this respect is found between both information sharing and decentralized decision making and a company's innovativeness.

Information and communications technologies (ICT) often have supported changes in organizational structures and practices for communication, information sharing, analysis and simulation of business processes. Early studies of ICT use, showed little productivity gain from technology investments. However, later studies found significant productivity gains associated with specific ways that technology is used. For example, reviews of firm-level studies found that the greatest benefits are realized when ICT investments are accompanied by other organizational changes that ICT use makes possible, such as: new strategies, business processes and practices, and organizational structures.

### **New, Different Skill Demands at the Work Place**

This is a seminal moment in the history for education and competitiveness. The fundamental shifts in the economy demand bold and creative labor work force policies. Formalizing the connection between education and competitiveness with an agenda focused on our century skills – which are widely acknowledged and supported by employers, educators, researchers and thought leaders – is the starting point.

Creating an aligned education system that prepares us to thrive, is the central competitiveness challenge of the next decade and an imperative requirement.

Advanced economies, innovative industries and firms, and high-growth jobs require more educated workers with the ability to respond flexibly to complex

problems, communicate effectively, manage information, work in teams and produce new knowledge. Generally on labor market, tends to be little coordination between formal education, vocational training and the world of enterprises. More important than the amount of education are the kinds of skills required by the new economy.

A study from Massachusetts Institute of Technology found that, beginning in the 1970s, labor input of routine cognitive and manual tasks in the U.S. economy declined and labor input of non-routine analytic and interactive tasks rose. This finding was particularly pronounced for rapidly computerizing industries. As firms take up technology, computers substitute for workers who perform routine tasks – but they complement workers who perform non-routine problem solving. Repetitive, predictable tasks are readily automated. Hence, computerization of the workplace has raised demand for problem solving and communications tasks, such as responding to discrepancies, improving production processes, and coordinating and managing the activities of others. The net effect is that companies, particularly those with heavy ICT investments – are hiring workers with a higher skill set, particularly expert thinking and complex communications skills.

Advanced economies compete by producing “innovative products and services at the global technology frontier using the most advanced methods” [Porter, Ketels & Delgado, 2007]. High-income countries have a high capacity for innovation—and their strategies are global in scope, which requires a workforce with the skills to “translate business models and offerings to international marketplaces,” offer “cross-border perspectives and solutions,” and apply “tangible skills such as language proficiency” and “skills that are less tangible, including greater sensitivity to cultural differences, openness to new and different ideas, and the ability to adapt to change.

The level of education is also to increase significantly in the following years in order to assure workers the desire level of competitiveness on labor market. The U.S. Bureau of Labor Statistics for example identifies 271 jobs with high-growth potential over the next 10 years; are likely to increase by 20 percent or more during this period. All of these jobs require at least some college education; most require one or more college degrees. More important than the amount of education are the kinds of skills required by the new economy On Investments and Returns on Education and Skills “As the larger return to education and skill is likely the single greatest source of the long-term increase in inequality, policies that boost the investment in education and training can help reduce inequality while expanding economic opportunity.” Ben Bernanke, chairman of the Federal Reserve, 2007.

Employers across cite professionalism or work ethic, oral and written communications, teamwork and collaboration, and critical thinking and problem



solving as the most important skills that recently hired graduates from high school towards postsecondary institutions need, according to a nationwide U.S. survey of 400 employers. The United States leads the world in several high-growth, ICT-intensive industries, including technology, media and telecommunications. Fueling creativity, innovation and adaptability that are the hallmarks of competitive, high-growth and emerging industries, requires a highly skilled, creative and nimble workforce [Ewing Marion Kauffman Foundation, 2007].

On the subject related to nowadays competitiveness on labor market we might say that all of us as workers, not just an elite few, need new skill skills that will increase our marketability and employability. Some of these news one that seems to be essential could be:

- Thinking critically and making judgments about the barrage of information that comes their way every day—on the Web, in the media, in homes, workplaces and everywhere else. Critical thinking empowers employees to assess the credibility, accuracy and value of information, analyze and evaluate it, make reasoned decisions and take purposeful action.

- Solving complex, multidisciplinary, open-ended problems that all workers, in every kind of workplace, encounter routinely. The challenges workers face don't come in a multiple-choice format and typically don't have a single right answer. Nor can they be neatly categorized as "math problems," for example, or passed off to someone at a higher pay grade. Businesses expect employees at all levels to identify problems, think through solutions and alternatives, and explore new options if their approaches don't pan out. Often, this work involves groups of people with different knowledge and skills who, collectively, add value to their organizations.

- Creativity and entrepreneurial thinking – a skill set highly associated with job creation Many of the fastest-growing jobs and emerging industries rely on workers' creative capacity – the ability to think unconventionally, question the herd, imagine new scenarios and produce astonishing work. Likewise, Americans can create jobs for themselves and others with an entrepreneurial mindset – the ability to recognize and act on opportunities and the willingness to embrace risk and responsibility, for example.

- Making innovative use of knowledge, information and opportunities to create new services, processes and products. The global marketplace rewards organizations that rapidly and routinely find better ways of doing things. Companies want workers who can contribute in this environment.

### **Computer programming and programming languages as specific skills**

Motto: “Programs must be written for people to read, and only incidentally for machines to execute”[Abelson & Sussman, SICP]

The good news is that the human being has an amazing capacity of remodeling, representing and solving various problems. This is possible by reconsidering and utilizing the language concept, not only for communication but also for knowledge. It is said that in our lifetime, we will change from 4 to 5 different types of jobs, doing different sorts of activities at our workplace. So no wonder if at some point in our professional careers we will be undertaking a task or work using things we would have never imagined before. One example could be the situation in which an end user or a worker from outside an IT department would have to use simple notions of programming as part of his work’ tasks. Computer languages of the future will be more concerned with goals and less with procedures specified by the programmer. Languages are instruments of thinking. They are tools used for processing. Science itself represents a set of methods and cognitive instruments.

What is computer programming? Simply stated, is really just about solving problems. It turns out that a large number of the problems we encounter in the real world are really just special cases of a more general problem. Luckily for us, many of these problems have been studied by computer scientists for a very long time, sometimes leading to probably unbeatable solutions, or sometimes solutions which are “good enough” for every day needs. In short, learning a language gives you skills, but teaching data structures and algorithms shows you how to use these skills wisely.

Computer programming is the craft of writing useful, maintainable, and extensible instructions which can be interpreted by a computing system to perform a meaningful task.

Computer programming is one part of a much larger discipline known as “software engineering” which includes several different aspects of making software including design, construction and quality control. The current definition of software engineering is still being debated by practitioners today as they struggle to come up with ways to produce software that is “cheaper, bigger, quicker”.

Textual programming languages involve series of imperative commands sequentially executed. Opposed to them, visual programming languages is like an assembly line in which workers do their assigned tasks as they are required.

Visual Programming Concept was developed on some very simple motivations:1) Many people think in pictures. 2) Textual programming languages have proven to be difficult for many people to learn to use effectively. 3) Some applications are very well suited to graphical development approaches. Visual programming is basically the use of visual expressions in the process of programming. They might be: graphical interfaces for textual programming

languages, graphical presentation of the behavior or structure of a program or syntax of new visual programming languages. Definitions of VPL:1). A programming language that uses a visual representation. 2) A visual language that manipulates visual information or supports visual interaction, or allows programming with visual expressions [Golin, 90]. 3) Any system where the user writes a program using two or more dimensions [Myers, 90]

The advantages of using a visual programming language instead of the text one are clear, but we will state only a couple of the most significant ones: fewer programming concepts; concreteness; explicit depiction of relationships; immediate visual feedback; not necessary to visualize a program in a sequential manner; eliminating an intermediate step in the process of creating a program; less emphasis on syntax; navigable program structure executable; partially specified programs; integration of pictorial clues

### **VisualBuilder - an exemple of developing new skills**

Motto: “If there is ever a science of programming language design, it will probably consist largely of matching languages to the design methods they support” [Robert Floyd, 1979, p. 455]



Fig 1. *VisualBuilder's logo*

Teaching all students to think and to be curious is much more than a technical problem for which educators, alone, are accountable. And more professional development for teachers and better textbooks and tests, though necessary, are insufficient as solutions. The same goes with employees, their skills, competences and work place requirements.

*Are visual programming languages the way to go?*

Reuse-in-the-small (libraries of subroutines) began nearly 50 years ago and is a well-solved problem. Reuse-in-the-large (components) remains a mostly unsolved problem, even though everyone agrees it is important and desirable.

We believe that visual programming will catch on in time and will provide a quantum leap in productivity. Just as assembly programming still exists today but is related to a very small, though important, niche, so too imperative text-based programming may find itself off the main track in the future, giving way to sleek and efficient visual systems that will allow many more people to tell the computer what they want done by plugging together components from a library, or pulling up a template and altering it visually on screen. Today's powerful personal computers, advanced graphical operating systems, and visually oriented tools make it possible to deploy a true visual programming language.

Why? Because people think in images. Many applications can be developed more effectively using graphical development approaches. And not finally because visual programming is more suited to development of a variety of concurrent or distributed processing scenarios.

*What is VisualBuilder?*

VisualBuilder is a revolutionary product, a visual programming language and development environment. VisualBuilder literally allows you to draw your application, not code it. You drag a component to the canvas, and wire it to the other components in the diagram. Then you hit the run button. No compile, no link, none of that. Just Run.

*Who is it for?*

Anyone who needs to solve a problem fast. VisualBuilder is for professionals that aren't programmers, but need to throw a script together now and then to get their job done. It will also impress professional programmers with its power and capabilities. System managers and IS pros will appreciate its easy reuse that makes the second and third programs faster and easier as you build up your own library of visual components. VisualBuilder is a revolutionary new programming tool. Unlike many tools that have been called "visual" but still require conventional programming, VisualBuilder is fully and truly visual – you don't need to "write code" to create programs. This technological breakthrough allows both programmers and non-programmers to construct computer applications quickly. With VisualBuilder, you create applications simply by drawing pictures. Your mouse does most of the work. Main steps: 1. Locate each component you want to use in the palette. 2. Drag each component out of the palette and drop it onto a canvas. 3. Link the components. The VisualBuilder palette includes over 200 assembled components you can use immediately to build programs.

*Why use VisualBuilder?*

The conventional approach to programming black boxes is to write subroutines, or functions that have well defined input and output. To connect a set of related procedures together, the programmer would have to write a main program to call the relevant functions in the desired order and make sure that at each stage the data is passed to the next function correctly. This code would then have to be compiled, linked with the other functions and debugged before it could be tested.

Consequently, even though the result may not be satisfactory, the programmer would have to put a reasonable amount of effort in writing the program. For example, he/she would have to make sure that the correct number of parameters were being sent to the appropriate functions and each parameter contained correct type and dimensionality of data. This process is extremely time consuming as one mistake along the process chain can lead to unexpected results and even program crashes. This can be avoided by using a robust standard that defines the input and output more rigorously. VisualBuilder takes exactly this approach to linking a set of components.

Each component within VisualBuilder only needs to be written and compiled once. When the component is written, the programmer specifies the type of information that the component can receive and the type of information that it can output. Thereafter, when the end-user wants to connect several tools together he/she simply connects the components together by dragging a cable between them with the mouse. VisualBuilder then checks to see if the connection is valid (i.e. the type of information being sent is receivable by the receiving unit). If it is valid, then the connection takes place, otherwise a message is displayed saying why the connection was not possible.

Once the programmer connects the desired topology of components he/she hits the start button to see the result. Furthermore, since the data types that are passed between the components contain the parameters associated with the particular data (e.g. a sample set contains the sample data within an array, the number of samples and the sample rate) then each component knows exactly how to deal with the data object whatever it contains. It is therefore virtually impossible to crash a VisualBuilder network.

In conclusion it is simply to learn and use, it has a platform independent development and deployment (developed in JavaA, written once, run everywhere, it can be used on mobile phones, desktops or on servers) it is very extensible (it can integrate existing or new components or it can be extended to target new platforms. It can be an educational tool for beginners not only on companies but also in schools.

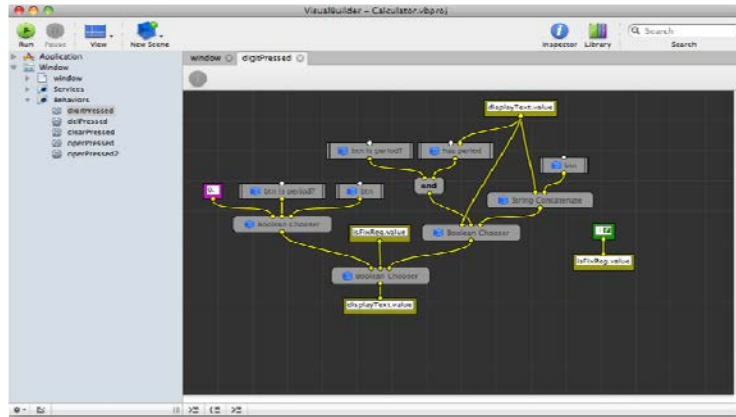


Figure 2. A simple calculator application – diagram editor



Figure 3. A simple calculator application - user-interface editor view

VisualBuilder will be available on 3 editions: Professional, Starter and Enterprise. The Professional Edition will be distributed free of charge through universities and other educational institutions.

### Services

Services are user-generated components. Services perform operations. For example, a service might read data from a database, update data in a database, or execute a web service. A service may also call Java or JavaScript code. Services usually require input parameters and provide output results.

The services available in VisualBuilder include:

- Database services – database services provide create-read-update-delete operations on a database. They are created by the user by importing a database schema.

- Query services - query services provide customized queries on a database.

Web services - execute SOAP, REST, RSS, or ATOM web services. They are created by importing a web service description or a RSS feed.

Java services - execute Java code. They are created by importing external Java libraries.

- JavaScript services - executes JavaScript code to perform client operations.

*What types of applications can be created?*

VisualBuilder can generate the following types of applications:

- Rich-client applications – used on desktop computers

Applications interacting with Microsoft Office Applications. The ability to read type libraries gives you access to any application that supports a Microsoft Object Model.

- Server applications – used on server computers

- Web applications – used on server computers in the cloud

- Enterprise applications – by wiring together web services with built-in components

VisualBuilder can generate other types of applications by adding specialized modules that extend the functionality of the product.

## **Conclusions**

As new skills are starting to be required on our work environment, we have the VisuaBuilder's example of a programming language, aimed to ease everyone's work and to enable better workflows within organizations. Not only a tool for our work tasks but also a learning platform that will allow us to understand, learn and utilize the concepts of Object Oriented Programming and also Component Oriented Programming.

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## REFERENCES

- [www.virtuallearning.ning.com](http://www.virtuallearning.ning.com)  
[www.itc.ku.edu/~rsass/rcreading/johnston04.pdf](http://www.itc.ku.edu/~rsass/rcreading/johnston04.pdf)  
[www.unige.ch/eao/www/Visual/Visual.Programming.biblio.html](http://www.unige.ch/eao/www/Visual/Visual.Programming.biblio.html)  
[www.cs.washington.edu/homes/jpower/vpl/vpl\\_home.html](http://www.cs.washington.edu/homes/jpower/vpl/vpl_home.html)  
<http://www.wi.leidenuniv.nl/CS/SEIS/vislang/VLcourse.html>  
<http://www-lsi.upc.es/~rbaeza/sem/vp/todo.html>  
<http://www.cs.berkeley.edu/~maratb/cs263/>  
<http://www.pitt.edu/~korfhage/is2650.html>  
<http://www.taylor-design.com/DataLink/Home.htm>  
<http://hudson.idt.net/~jvn/ch2/ch2.htm>  
<http://www.ntt.ca/prograph.html>  
<http://www.cy-soft.com/prographe.html>  
<http://www.mactech.com/articles/mactech/Vol.10/10.11/PrographCPXTutorial>  
Partnership for 21<sup>st</sup> Century Skills, The Conference Board, Corporate Voices for Working Families & the Society for Human Resource Professionals, 2006.  
Vlada, M., 2005, Conferinta Nationala de Invatamint Virtual, CNIV.  
Whitley, N., 1997, Visual Programming An Outlook for the Academia and Industry, pp.180-208.





## **A MODEL FOR CONTINUOUS EDUCATION THROUGH PERIODIC ADAPTIVE E-ASSESSMENT**

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### *Abstract*

The paper proposes a model suitable for adult education based on periodic use of adaptive e-assessment applications. The model facilitates professional competences development, which is the key factor for achieving the competitive advantage in knowledge society. Technological boom placed e-assessment in an important position among today educational elements. An intelligent option of electronic evaluation is the adaptive e-assessment. Based on computer adaptive testing principle, it is considered to be a self-directive learning tool: the users receive new challenges through each test item, establish their own knowledge road. Adaptive e-assessment offers a competitive environment, where the adult is stimulated to continuous improvement: the gained knowledge depends on self actions. The proposed educational model can be used for training to obtain certifications awarded by professional associations, but also to achieve performance in high academic programmes.

*Keywords:* continuous education, e-learning, e-assessment, competences development

### **Introduction**

The knowledge economy is more than an economic jargon, an umbrella for expressions such as “the increase in the value chain”, “the achievement of the added value”, it represents a set of fundamental changes in the economy, but also in people’s mentality. There are many definitions of the knowledge economy, the most intuitive being the one that describes it as the economy that is based on creating, evaluating and exchanging knowledge. The need for continuous development of individual knowledge is commonly accepted by both European public forums and private firms. According to the European Council, every global citizen has to be equipped with IT skills, foreign languages, technological culture, entrepreneurship and social skills [Commission of the European Communities, 2005, p. 3]. The European Union has established a few priority fields of the new economy, as the knowledge economy is called by some specialists, among which

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the development of electronic Europe can be found. The main lever in the process of “social inclusion and universal access to technology” [Jitaru, & Pribeanu, 2006] or of economic e-development is the ITC industry. The industry of the information technology is a powerful instrument for the economic development, the increase in competitiveness, the improvement of our living, the professional improvement of the ones involved in the work process, the achievement of performance in the public sector. Five causal chains that capture the essence of what ITC means for the new economy have been identified [Meijaard, 2001]: the organizational and market processes, the characteristics of the assets, the social and cultural processes and first of all, learning and innovation will be influenced. The opportunities for innovation in education and the knowledge management will lead without doubt to the economic recovery.

As a consequence of the changes from the new economy, the educational processes have also undergone metamorphosis: the focus on the higher education and on educating the already employed professionals increased. The importance of the learning process was given credit not only by schools and universities, but also by the organizations [Dragomirescu, 2006]. Due to the technological explosion, e-learning has reached an important position among the education instruments of today. The fact that it offers flexibility, mobility, adaptation makes it the perfect candidate for the educational processes in the continuous training. The focus on the education in the current society is fundamental: one may note an “unprecedented dissemination of the knowledge towards all the citizens by new means, by using the Internet in priority and the electronic book and the use of the learning methods by electronic procedures (*e-learning*)” [Draganescu, 2001].

When talking about knowledge and learning in a professional environment, the concept of competency has to be taken into account [Lundin, 2005, p. 15]. As this concept has aroused the interest of many researchers, there are many definitions available in the literature. Competency is defined as ‘the degree to which individuals can apply the skills and knowledge associated with a profession to the full range of situations that fall within the domains of that particular profession’ [Lysagh, & Altschuld, 2000, p.95] or, shortly, as the combination between knowledge and ability to apply that knowledge [Turner, 1996, p. 4]. Competency can be considered from two perspectives, according to Suikki: the theoretical and the operative perspective [Suikki, Tromstedt, & Haapasal, 2006, p. 723-728]. From the theoretical perspective, competency is a structure that facilitates a certain behavior. From the operative perspective, it is the ability to manage ‘complex unpredictable situations’, a combination between knowledge, skills, attitudes, strategic thinking. The immediate effect of competences possession should be reproduction of knowledge and competency or competent behavior. In order to

achieve the competitive advantage, the business environment requires continuously new competences.

The current paper proposes a model for continuous education, which aims to improve professional competences and to make adults more attractive for organizations. The model is based on current use of e-assessment services, a necessary feature of every e-learning application. The model is presented in the framework of informatics tools used in education. The applicability of the model for advanced master programmes, MBA programmes or professional certification processes is also provided.

### **Competences Development through Education**

As a consequence of quick changes, organizations ask for 'adaptable pre-trained workers' and for employees 'to be more involved in self-directed ongoing development' [Garofano, & Salas, 2005, p. 281]. As learning means the 'gaining of knowledge, understanding or a skill' [Garofano, & Salas, 2005, p. 282], the workers from knowledge society develop their competences through learning: 'employees need to take greater personal responsibility to ensure their skills are current and marketable' [Garofano, & Salas, 2005, p. 282].

There are many explanations in the literature for adults engaging in learning activities, once they graduated a formal education institution. Huggins identified three motivational factors for adults to participate in a learning activity: possible outcome, learning opportunity and external factors [Huggins, 2004, p. 38]. The outcome has two directions: the individual and the environment in which she/he works. According to Huggins' study, the adult who starts a learning activity wants to develop, to improve his confidence, to progress, to be good at his job or he prepares himself for a promotion. The learning process is regarded as a personal challenge, in most cases. As previous mentioned, to be competent implies a context, a community. Most adults participates at learning activities to support colleagues, 'to be an effective member of the team' or 'to pass the knowledge on to other members' [Huggins, 2004, p. 42]. Other researches underline the monetary and non-monetary benefits of education. In the second category, the following benefits are mentioned: carrying out more interesting and stimulating tasks, increased job stability and autonomy, healthy working conditions, more appropriate tasks [Fabra, & Camisón, 2009, p. 600 – 610]. Demirel simply points out the fact that adults have to engage themselves in learning activities, because of the 'necessity to cope with change': adults have to permanently renew their life perspective, their conduct and values [Demirel, 2009, p. 1710]. A lot of studies so far indicate education in 21<sup>st</sup> century as a necessary continuous process [Shi, &

Tsang, 2008, p. 187 - 217), [Demirel, 2009, p. 1710], as a key element to survive in knowledge society: “Among individual characteristics, education becomes a key-element. It offers the key to attaining a position in the labor market and provides individuals with access to well-remunerated and non-alienating jobs.” [Fabra, & Camisón, 2009, p. 601]

The importance of learning in adults’ life is also proven by the variety of trainings held in firms and organizations [Marimuthu, Arokiasamy, & Ismail, 2009, p. 265-272] and by various tools meant to develop employees skills or to fill knowledge gaps [Delcea, & Dascalu, 2009, p. 115-117). Selection for suitable learning activities for competences development has, without a doubt, a tremendous impact on firm well being [Kröll, 2007, p. 1- 10] and, as well, on individuals’ well being: “There is sufficient empirical evidence that show non-monetary returns on educational investment improve people’s well being and quality of life.” [Fabra, & Camisón, 2009, p. 601]

A learning process turns out to be good when the degree of transformation made possible through that process is high or the degree of competences increases. There are ways to evaluate adult education programs: there are formative ways (programs are evaluated with regard to the consistency between the program plan and implementation) and summative ways (programs are assessed in terms of their outcome) [Shi, & Tsang, 2008, p. 187 – 217].

### **E-assessment Role among Informatics Tools Used in Adults’ Education**

As participating at face-to-face courses might be quite time consuming for an individual engaged in economic activities, the use of e-learning tools became a well-spread solution for adults’ education. This practice complies with the effort of digital economy to raise the accessibility level of information systems. Also, a web-based tool is a ‘low cost and accessible tool for the dissemination of knowledge’ [Stergiou, & al., 2009, p. 827].

Evaluation plays an important role in education, as it can improve the learning process itself [Waters, & McCracken, 1997]. Frequent testing increases the quantity of knowledge assimilated by students/ trainees, but makes it difficult for the trainers/ professors to correct the exams. The solution to this problem was brought by electronic testing. A computer-based test can be developed in an e-learning platform as a service (Moodle [Al-Ajlan, & Zedan, 2007], SinPers [Bodea, 2007]) or as a stand-alone system, taking into account some form of knowledge organization, specific to its target domain

In order to build efficient assessment services, the place of these types of services into the holistic approach of an e-learning platform has to be defined: they

are commonly seen as parts of the LMS macro component of an e-learning application. The LMS is one of the three main components of an e-learning platform: LMS (Learning Management System - manages the relations trainee-content, trainee-trainer, has functions for recording the trainees, administration and delivery of the courses, record of the trainees' progress, communication at the level of the system users), LCMS (Learning Content Management System - administrates the content of the web sites, with everything that this administration involves) and the virtual environment (a set of tools for distributing training contents and for providing interaction) [Colace, De Santo, & Pietrosanto, 2006]. Student management actions, course management actions, student activity monitoring and tracking, reporting and assessment are parts of a LMS. Still, the assessment service has to work with learning objects which are managed by the LCMS.

There are some stringent problems in conceiving assessment services. The main issues in the e-testing services, with direct impact over the trainees are: question management, noting and transmitting the results, but also the elements of graphics and interface in exposing the tests. The engine to any evaluation test is represented by the questions. In order to be imported in different platforms, the questions must have a standardized format. The types of questions available in the classical tests are reliable also in the automatic tests (questions of multiple choice type, of true/false type or with short answer), except for the questions that need a free answer. Yet, an attractive type of questions available only in e-testing is represented by the hot spot questions. To conclude, the main specific problems for assessment services (both to the ones integrated in e-learning platforms and the stand-alone ones) can emerge from:

- creating the questions (conceptual units of the tests);
- creating the tests (the algorithms for selecting the questions);

### **An Educational Model based on Adaptive E-assessment**

#### *The proposed model*

The authors propose an educational model for adults, based on periodic assessment. The fact that the e-assessment tool can be seen as a learning tool, not just an examination tool, complies with other researchers' opinion, that 'learning from errors is a promising method', just like problem-based or task-based education methods [Stergiou, & al. 2009, p. 827–838]: "Oser and Spychiger claim that every error includes the chance to learn from it, if learners can view it as learning occasion. Therefore, learners have to identify the error and understand the correct solution by comparing the incorrect solution systematically with the correct

one. The tutor’s feedback is of great importance.” [Stergiou, & al. 2009, p. 829]. The model is synthetized in (Figure 1): after answering at test questions, the users of an e-assessment application have the possibility to return to the incorrectly answered questions: in this way, the impact to knowledge creation process through the e-assessment is maximized. By inserting an adaptive behaviour to an e-assessment application, the users can get always challengeable questions: for example, if the user answers incorrectly to one question, the next one will be easier, more suitable for the user’s knowledge level. If the user answers correctly to one question, the next one will be harder, so he/she can’t get bored during the test. Also, statistical methods have to be applied in order to obtain comparable results between a user who answered easier questions to other who answered more difficult ones.

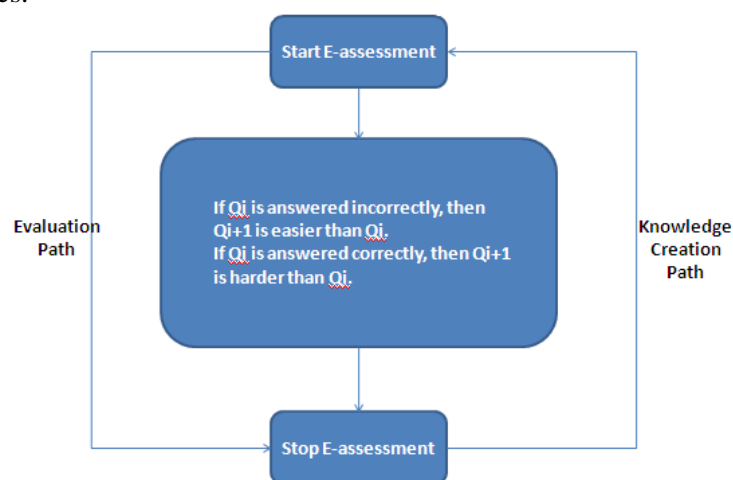


Figure 1. Education model based on E-assessment

*The application of the proposed model*

The model is suitable for certification processes held by professional associations ([Bodea, & Dascalu, 2009a, p. 11], [Bodea, & Dascalu, 2009b, p. 68]), but also for MBA programmes or advanced masters. The major benefit brought by the model to adults’ education can be seen in firms’ business performance [Dascalu, Delcea, Coman, Palaghita, Vintila, & Bobe, 2010, p.2404]. The extensive use of e-testing tools in enterprise environments can be identified in (Figure 2), also: the e-testing is seen as a tool applicable in knowledge strategies.

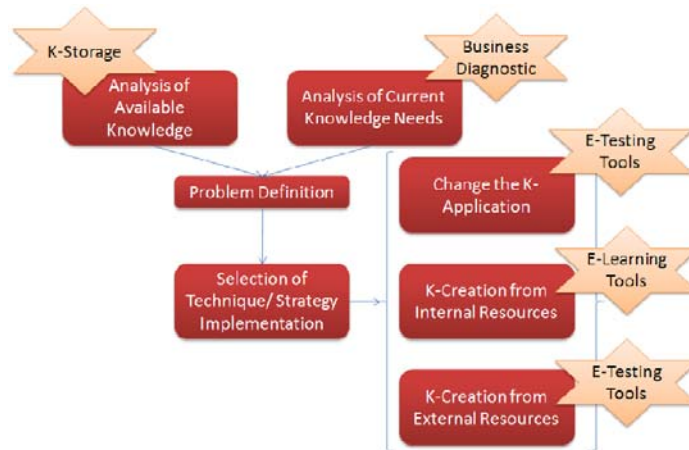


Figure 2. Enterprise K-Strategies Tools [Delcea, & Dascalu, 2009, p. 116]

## Conclusions

The current paper underlines the benefits of an education model based on periodic adaptive e-assessment: the first advantage of such a model is the increase in professional competences of adults who are already employed or are in the process of seeking for a new job. Although evaluation can be stressful, the proper use of it can be a rich learning experience. The model is presented in the framework of knowledge society and innovative learning tools brought by this type of society.

## BIBLIOGRAPHY

- Al-Ajlan, A., & Zedan, H., 2007, E-learning (MOODLE) Based on Service Oriented Architecture, available: <http://www.tech.dmu.ac.uk/STRL/research/publications/pubs/2007/2007-23.pdf>
- Bodea, C., 2007, "SinPers-An Innovative Learning System in Project Management", in *Proc. of the 21st IPMA World Congress*, Cracow, Poland.
- Bodea, C. N., & Dascalu, M., 2009a, "Testing as a Learning Tool in the Project Management Competence Development Environments", in *Studia Informatica*, 3, p. 11-14.
- Bodea, C., & Dascalu, M., 2009b, "A parametrized web-based Testing Model for Project Management", in *Proceedings of the Advances in Web-based Learning, ICWL 2009*, Aachen, Germany: Springer, p. 68-72.
- Colace, F, De Santo, M., & Pietrosanto, A., 2006, "Evaluation Models for E-learning



- Platform: an AHP Approach”, in *Proc. Of The 36<sup>th</sup> ASEE/IEEE Frontiers in Education Conference*, San Diego, CA.
- Commission of the European Communities, 2005, Proposal for a Recommendation of the European Parliament and of the Council on Key Competences for Lifelong Learning. Brussels, Belgium: European Commission, available: [http://ec.europa.eu/education/policies/2010/doc/keyrec\\_en.pdf](http://ec.europa.eu/education/policies/2010/doc/keyrec_en.pdf).
- Dascalu, M., Delcea, C., Coman, M., Palaghita, D., Vintila, B., & Bobe, C., 2010, “E-testing as a Self-Adaptive Learning Tool in Enterprise Environments: a Case Study for Romanian Consulting Firms”, in *Proceedings of INTED2010*, Conference, Valencia, Spain, pp.2402-2412.
- Delcea, C., & Dascalu, M., 2009, “Knowledge Strategies Tools for Managing Enterprise Crisis”, in *Proceedings of the 4th International Conference on Knowledge Management: Projects, Systems and Technologies*, Bucharest: “Carol I” National Defense University, Romania, p. 115-117.
- Draganescu, M., 2001, “Societatea informațională și a cunoașterii. Vectorii societății cunoașterii”, in *Romanian Academy, Artificial Intelligence Research Institute*, available: [http://www.racai.ro/INFOSOC-Project/Draganescu\\_st\\_a01\\_new.pdf](http://www.racai.ro/INFOSOC-Project/Draganescu_st_a01_new.pdf).
- Dragomirescu, H., 2006, “Organizații bazate pe cunoaștere”, in *Romanian Academy, Artificial Intelligence Research Institute*, available: [http://www.racai.ro/INFOSOC-Project/Dragomirescu\\_st\\_g06\\_new.pdf](http://www.racai.ro/INFOSOC-Project/Dragomirescu_st_g06_new.pdf).
- Fabra, E., & Camisón, C., 2009, “Direct and indirect effects of education on job satisfaction: structural equation model for the Spanish case”, in *Economics of Education Review*, 28, p. 600–610.
- Garofano, C., & Salas, E., 2005, “What influences continuous employee development decisions?”, in *Human Resource Management Review*, 15, p. 281–304.
- Huggins, K., 2004, “Lifelong learning – the key to competence in the intensive care unit?”, in *Intensive and Critical Care Nursing*, 20, 38-44.
- Jitaru, A. and Pribeanu, C., 2006, “Accesibilitatea tehnologiilor informatice: cerințe actuale și perspective în contextul societății informaționale”, in *National Institute of Research and Development in Informatics, Bucharest, Romania*, 16(4), available: [http://www.ici.ro/RRIA/ria2006\\_4/art01.html](http://www.ici.ro/RRIA/ria2006_4/art01.html).
- Kröll, M., 2007, “Limits and possibilities for competence development in firms”, in *European Conference of Educational Research (ECER)*, Ghent, available: [http://www.vetresearch.net/ECER\\_2007/sep21/session\\_10c/985/985\\_pdf/attach/Kroll\\_ecer\\_2007\\_p985.pdf](http://www.vetresearch.net/ECER_2007/sep21/session_10c/985/985_pdf/attach/Kroll_ecer_2007_p985.pdf).
- Lundin, J., 2005, “Talking about Work: Designing Information Technology for Learning in Interaction,” in *Gothenburg Studies in Informatics*.
- Lysagh, R. M., & Altschuld, J. W., 2000, “Beyond initial certification: the assessment and maintenance of competency in professions”, in *Evaluation and Program Planning*, 23, pp. 95-104.
- Marimuthu, M., Arokiasamy, L., & Ismail, M., 2009, “Human Capital Development and Its Impact on Firm Performance: Evidence from Developmental Economics”, in *The Journal of International Social Research*, 2(8), p. 265-272.

- Meijaard, J., 2001, "Making Sense of the New Economy", *Research Report 0009/E, Erasmus University Rotterdam and EIM Business & Policy Research*, available: <http://www.ondernemerschap.nl/pdf-ez/H200009.pdf>
- Shi, Y., & Tsang, M., 2008, "Evaluation of adult literacy education in the United States: A review of methodological issues", in *Educational Research Review*, 3, p. 187–217.
- Stergiou, N., Georgoulakis, G., Margari, N., Aninos, D., Stamataki, M., Stergiou, E., et al., 2009, "Using a web-based system for the continuous distance education in cytopathology", in *International journal of medical informatics*, p. 827–838.
- Suikki, R., Tromstedt, R., & Haapasal, H., 2006, "Project management competence development framework in turbulent business environment", in *Technovation*, 26, p. 723–738.
- Turner, J. R., 1996, International Project Management Association global qualification, certification and accreditation, in *International Journal of Project Management*, 14(1), p. 1–6.
- Waters, R., & McCracken, M., 1997, Assessment and evaluation in problem-based learning, available: <http://www.succeed.ufl.edu/papers/fie97/fie97-010.pdf>



## THE SOCIAL AND CULTURAL PATTERNS IN THE CONTEXT OF GLOBAL INTERACTION. AN OVERVIEW ON THE COMMUNICATION ACCOMMODATION THEORY

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### *Abstract*

The technological opportunities provided by new media have entirely reconfigured the relationships between people and their representations on worldwide communication and on global interaction. In order to adjust to the unprecedented changes brought about by globalization and the intercultural exchange, individuals as well as social groups have become aware that adaptation is mandatory. My main interest is focused on the cognitive reasons for code-switching and other changes in communication as individuals seek to emphasize or minimize the social differences between themselves and their interlocutors. The starting point is Howard Giles' Communication Accommodation Theory which discusses the causes and effects of potentiating convergence between people through the adjusting of the communication styles. The theoretical framework is also valuable as it may account for the main features of the virtual interaction between people from different corners of the world.

*Keywords:* communication accommodation, new technologies, social networks

### **Introduction**

It has become obvious that starting with the end of the last century, humanity had passed into a new period – the informational era. Thousands of studies analyze this contingency and other thousands will follow, developing new concepts and theories related to the unprecedented mutations which characterize the human society. The reality of the past centuries is defined by ubiquity, by instantaneity, by technological development in the communication field. “The former realities have been changed by the ideal of emancipation based on oscillation, on plurality and on the tendency of unification and global communication [Drăgan, Anton, Sosai-Fuiorea, 2002, p. 218].

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In this perspective, it is likely to state that every act of communication in the contemporary society implies the existence of an accommodative potentiality which may come to surface at any moment. Moreover, communication is destined to be perceived as an “inherent form of influence”, as social actors unconditionally intend to share a meaning (of an idea, of a situation, of a phenomenon); subsequently, the conclusion is that persuasion, influence has become “consubstantial to communication” [Mucchielli, 2002, p. 270].

At this level, the background elaborations of the human environment under the pressure of the contemporary forces become a veritable object of interest if we underline its impact on individuals, on groups of people, on the local and global context. The transformations of our localities in “globalities” (in terms of “deterritorialization”), the changes in our real ambiance, the relativization of the former reference points, the influence of the distant political and economical phenomena on the existential frameworks, the penetration of media and communication technology in our natural spaces, the multiculturalism as a growing standard, the intensive mobility etc stand for more than a future promise – they stand for a *sine-qua-non* condition for adjusting to the new structural and functional exigencies. In this way, the mental and actionable imperative towards modernity directly implies an active sense of affiliation to the wide world, the individual’s ability to live the experience of a “distant identity”, an identity which surpasses the immediate locality and catalyzes the awareness of the human ties, of the common risks and opportunities, of mutual responsibilities, of a global world where there is “no alterity”.

All things considered, the purpose of this paper is to underline the importance of the communication accommodation when interacting with people from other places than our country or region, with other cultural patterns and social profiles, with different backgrounds and mentalities. Therefore, I will focus on the basic elements of the Communication Accommodation Theory, on its convergence with other similar approaches and on the general perspective regarding the impact of the new technologies on social groups.

The main questions to be answered are: 1) which are the main components of the Communication Accommodation Theory which may account for the patterns of the global interaction?; 2) is communication a key factor in mediating relationships at a global scale?; 3) why are individuals liable to join virtual social networks?.

### **The theoretical framework of the Communication Accommodation Theory**

The Communication Accommodation Theory (CAT) was developed by Howard Giles, professor of communication, at the University of California, Santa Barbara.

CAT explains some of the cognitive reasons for code-switching and other changes in speech as individuals seek to emphasize or minimize the social differences between themselves and their interlocutors. Originally, the theory was based on speech, but it has since been expanded to cover verbal and nonverbal behaviours as well. Depending on how we relate the other person's speech and behaviours to our own determines our own behaviours during the conversation [McLaughlin, 1987, p. 13]. Being originally conceptualized to mine more complex socio-psychological understanding of language choices than a mere recourse to people's socially normative dispositions [Giles, Powesland, 1975]. Over the years, Giles' theory has been elaborated and revised in varying directions and it has, according to many commentators, assumed the status of a major socio-psychological theory of language and social interaction [Tracy, Haspel, 2004].

Giles posits that when speakers seek approval in a social situation they are likely to converge their speech to that of their interlocutor [Giles, St. Clair, 1979, p. 67]. This can include, but is not limited to the language of choice, accent, dialect and paralinguistic features used in the interaction. In contrast to convergence, speakers may also engage in divergent speech. In divergent speech, individuals emphasize the social distance between themselves and their interlocutors by using linguistic features characteristic of their own group. People try to adjust their style of speech to others in order to gain approval, increase communication efficiency, and maintain positive social identity with the person to whom they are talking [Runciman, 1998, p. 24]. The two first goals can be considered *convergent* since they seek an effective communication. Both speaker and listener share a cooperative behaviour which leads them to convergence in their speech. Maintaining a positive social identity is seen as *divergent* because the speaker wants to keep an identity with a reference group. In this situation the interlocutors behave competitively diverging from each other by emphasizing the differences in their speech. To communicate effectively, speaker and listener should converge in their mutual goal to accomplish intelligibility. The speakers involved in this process are expected to work upon these adjustments according to the communicative situation in which they find themselves [McLaughlin, 1987, p. 14].

CAT intends to analyze the discursive variations, which are the results of speech adjustments or accommodations done by the speakers according to their personal characteristics, speech style, and specific linguistic usage [Jaworski, Coupland, 2006, p. 229]. Convergence is defined as "a strategy whereby individuals adapt to each other's communicative behaviours in terms of a wide range of linguistic/prosodic/nonvocal features including speech rate, pausal phenomena and utterance length, phonological variants, smiling, gaze, and so on" [Giles, Coupland, 1991, p. 35]. Divergence refers to "the way in which speakers

accentuate speech and nonverbal differences between themselves and others” [Giles, Coupland, 1991, p. 36]. Convergence is seen as expressing a desire for social integration; divergence, as serving the function of promoting social distance.

Still, there is a third approach to the communication accommodation – the Over Accommodation, which is where one attempts to over do efforts in regulating, modifying or responding to others. There are three ways one can over accommodate: the first is sensory where people tend to over adapt to others who are perceived as limited in their abilities. The second is dependency, where the person who is talking, speaks to others as if they’re in a lower status than them. Lastly, intergroup occurs when the speakers place listeners in cultural groups without acknowledging individual uniqueness. Overall, this theory tries to ‘accommodate’ for differences within situations. In interpersonal situations, language can be used to convey information about one’s personality, temperament, social status, group belonging, and so forth. Although many of us like to think that we interact essentially the same way to virtually every person we encounter, thanks to fairness and our integrity, this simply is not true. In most instances, it is desirable, and even necessary, to adjust our language patterns to our conversational partners, be they close friends or loathed felons. Sometimes we encode this deliberately and consciously, other times it emerges automatically and may not even be decoded overtly.

There are four components in CAT which are crucial to the understanding of the general framework: the *sociohistorical context*, the *communicators’ accommodative orientation*, the *immediate situation* and *evaluation and future intentions*. These components are essential to the theory and affect the course and outcome of intercultural conversations [Gudykunst, 2003, p. 172].

The sociohistorical context represents the general basis for any intercultural communication. Thereby, the relations between the two interacting groups influence the communicators’ behavior. Such influencing factors are for example political or historical relations between nations or different religious or ideological views between the two groups participating in the conversation [Gudykunst, 2003, p. 172]. “The essence of the group’s life is a dynamic relationship between several elements: activities, feelings, norms, interactions and communication. The attachment between the group’s members is a result of contacts and cooperation, of similarity and identification; the interaction and the communication lead to the acquirement of common norms and to a special commitment to the group” [McQuail, 1999, p. 105].

Speaking about the accommodative orientations, there are three factors that are considered to be very important: “intrapersonal factors” (e.g. personality of the speakers), “intergroup factors” (e.g. communicators’ feelings toward outgroups),

and “initial orientations” (e.g. perceived potential for conflict) [Gudykunst, 2005, p. 15]. People who have many things in common are usually part of the same groups and are characterized by the same predispositions which make them liable to closer contacts and to a more genuine communication. This is why “the behaviour is no longer seen as a psychological structure, but as a relationship between the individual and the others from the socially and culturally contextualized community [Caune, 2000, p. 66]”. In this way, willingly or not, individuals are systematically seeking for the preservation of homogeneity in order to preserve the social identity [Yzerbyt, Schadron, 2002, p. 197].

The immediate situation, i.e. the actual communication, is shaped by five aspects which are interrelated: “sociopsychological states”, “goals and addressee focus” (e.g. motivations and goals for the encounter), “sociolinguistic strategies” (e.g. convergence or divergence), “behavior and tactics” (e.g. topic, accent) and “labeling and attributions”.

The evaluation and future intentions deals with how communicators perceive their conversational partners’ behavior and its effects on future encounters between the two groups. Positively rated conversations will most likely lead to further communication between the interlocutors and other members of their respective groups [Gudykunst, 2005, p. 16]. When speaking about a mature social structure, the social identity is a fact of life, acting as a model, but even in this situation, it has a dynamic character given by the continuous minor adjustments. From this point of view, the identity of the group becomes a symbolic bond, a motivating factor which reinforces the cultural patterns. This is why the main challenge of a growing group is the establishment of several general coordinates which exclude the aleatory and stimulate the integrated action. The production of a common imaginary involves, nevertheless, a negotiation over the meaning, over the cultural and symbolic context where the meaning may emerge. In this register, it is obvious that through the symbiosis of the cultural elements which define a certain social group, the identity of the self can be interpreted through the identity of the group as a form of “identity reconstruction [Pailliant, 2002, p. 161]”.

### **Accommodation as a common experience**

Giles’ convergence may be placed in the same analytical sphere as Kenneth Burke’s conception, a researcher focused on the language study as a means to persuade people to act in a certain direction. So he defined persuasion as “the use of language as a symbolic means of inducing cooperation in beings that by nature respond to symbols [cited in Larson, 2003, p. 155]”. The active cooperation is encouraged by the identification, associated concept to the Aristotelian concept of



“common experience”. The evolution of the identification is sustained by the linguistic sharing of the substances or of the raw material inherent to the main concepts. Sharing substances makes us consubstantial with others. There are various possible substantial connections among and between interactants. Our symbolic ways for marking consubstantiality are identifications, upon which rhetorical action is based: “you persuade a man only insofar as you can talk his language by speech, gesture, tonality, order, image, attitude, idea, identifying your ways with his [cited in Larson, 2003, p. 155]”. Here, identification is a supplement to accommodation.

The identification with others evolves in such a way that we seem to possess the same symbolic realities – “my sense about myself is increasing by imitating you while my sense about yourself is increasing in direct ratio with my sense about myself [Markova, 2004, p. 152]”. In other words, we identify ourselves with persons who share the same conceptions about life, who enjoy the same hobbies, who have the same interests, the same life style. If we identify ourselves with the persuasive agents, it is very likely to be influenced by what they say or recommend us to do. Therefore, the implicit objective of the human agent is to attach the proper importance to the common substances.

On the other hand, the receiver’s mission is to examine critically the existence of common substances in order to observe whether there is any actual compatibility between different convictions and values or the persuasive agent simply tries to induce the idea of compatibility. We identify ourselves with others because we share the same main experiences. Through identification (“they are like me” becomes “I’m like them”); the individuals feel or think they feel like the others, marking the first steps towards alterity.

In Burke’s conception, the sharing of “substances” or the “identification” is an equivalent for persuasion. To him, the majority of the persuasive actions refer to our “essential parts”, to concepts which define our common backgrounds. All the words have an emotional essence and uncover the individual’s feelings, attitudes, values and judgments. The examination of the persuasive language underlines multiple aspects about us and about the persuasive agents who ask for our interest, support or commitment. In order to catalyze the process of identification (a similar concept to the Aristotelian “common experiences”), Burke considers that the most important factor is the ability of the persuasive agent to induce similarity, to relate his way of expressing to the language of his receiver [cited in Larson, 2003, p. 165].

In conclusion, communication accommodation becomes a mutual feeling of identification between the source and the receiver, as a result of the usage of symbols and images, the emphasis being simultaneously laid on the source,

receiver and the message. All of these elements collaborate to generate a persuasive process and, progressively, the accommodation becomes self-accommodation. “Starting with the creation of social relations, the social appreciation has been deeply valued – the human essence has changed and we need to see this fact naturally: the human being as a social being is concentrated on the exterior; in substance, he acquires the vital feeling only by the way he perceives what others think about him” [Neumann, 2004, p. 109].

At this level, the ego-defensive function is potentiated, the function which refers to “individuals’ tendency to preserve an acceptable self-image, according to the other’s opinion [McQuail, 1999, p. 158]”. The self-definition is produced in relation with the others and often determines confrontations and mutations generated by the acute necessity of the human being to measure with alterity. Gradually, alterity becomes a witness, a mirror to the self who aspires to the social reality. The comparison to others is rooted in a brotherly instinct, in that origin co-existence feeling defined by Husserl as the measure of the others’ conscience in the process of understanding our own identity, our self [cited in Caune, 2000, p. 66]. The human being is shaping himself according to alterity, even though it’s not a question of imitation or of relation of superiority or inferiority; everyone defines himself looking into the others, and this inherent act of identification becomes the individual’s truth.

### **The virtual environment – an accommodation at a global scale**

In the process of deciphering the facades of the new patterns of interaction, the interpretation key may be the re-configuration of the social and cultural patterns by the virtual space (seen as a facilitator of interaction). Consequently, the emergence of certain social networks which surpass the political boundaries and defy the border constraints seems a veritable object of interest when discussing the relevance and importance of the new technologies and of the social influence models. At this level, by admitting the crucial status of new media in the architecture of the modern society, one of the prime notions to focus on is represented by the global communities, designed by the technological effluvium.

Moreover, the emphasis lays on the new technologies which hold a special potential to deterritorialize, culturally and morally speaking – they are liable to sustain the perception that our localities are tied, in joy and in sorrow, to faraway corners of the world, they are liable to determine us to see the world through its common causes and effects for the entire humanity. The internet has become a platform, and information stands for the main “driving force”; “the participatory architecture” has a direct impact on the social networks, stimulating individuals to

aggregate in different virtual communities by overbidding the similarity between people and the communication between identities. Gradually, the transformative action of individuals (technologically speaking) brings about the emergence of a specific cultural disposition, of “an effusion towards the world” which substantially changes people’s representations on the world and on the social reality.

In other words, the desire of being a significant part of a worldwide social network becomes progressively an incentive for communication accommodation. This is why in order to adjust to the unprecedented changes brought about by globalization and the intercultural exchange, individuals as well as social groups have become aware that adaptation is mandatory. Accepting your interlocutor, trying to know him better, to discover and understand his needs, his aspirations, his goals, to build bridges in your social and cultural interaction stands for an usual practice nowadays.

It has become evidence that more and more people are interested in the facilities provided by the Internet, especially with a view to feel like an organic part of a virtual community. Lots of Internet users have contacted or participated in social networks and the growth in membership and usage is expected to continue. The popularity of these communities reflects an interesting reality taking into account its multidimensional implications - individuals are using new technologies, such as the Internet, to fulfill social economic, political, religious and cultural goals etc. Moreover, individuals use virtual communities to discuss shared interests (communities of interest), to develop social relations (communities of relationships) and to explore new identities (communities of fantasy) [Rheingold, 2000]. „The combination of identification and individualism is at the source of the culture of networked individualism found by sociologists to be the pattern of sociability in the network society. In the age of the Internet, individuals do not withdraw into the isolation of virtual reality. On the contrary, they expand their sociability by using the wealth of communication networks at their disposal, but they do so selectively, constructing their cultural world in terms of their preferences and projects, and modifying it according to the evolution of their personal interests and values.” [Castells, 2009, p. 120].

The culture of networked individualism finds its platform of choice in the diverse universe of mass self-communication: the Internet, wireless communication, online games, and digital networks of cultural production, remixing and distribution. The Internet is a communication network, and as such it is also an instrument for the diffusion of consumerism and global entertainment, of cosmopolitanism, and of multiculturalism. But the culture of networked individualism can find its best form of expression in a communication system characterized by autonomy, horizontal

networking, interactivity, and the recombination of content under the initiative of the individual and his/her networks.” [Castells, 2009, p.125].

### **Conclusion**

All things considered, the symbolic reality developed by the online social networks has reconfigured the interpretative perspectives on space and human interaction. Moreover, the new technological opportunities have gradually relativized the cultural and national frames of understanding and approaching alterity – the relationship between *I* and the *others* is no longer seen as an antinomy, but as a symbiosis of organic components. At this level, one of the main catalysts is represented by convergence in the sense of self-accommodation.

The virtual space has become the uncensored domain where different identities interact and share similar opinions, thoughts, feelings, independent of the social, cultural, political, religious constraints imposed by the real world. The virtual groups offers them the unique possibility to explore their inner world and the boundless wide world simultaneously, offers them the unprecedented chance of defying the limitations of the given social and cultural ground through the infinite range of possibilities provided by the potentiality of the communication accommodation.

### **BIBLIOGRAFY**

- Bauman, Z., f.a., *Globalizarea și efectele ei sociale*, Editura Antet, București.  
Castells, M., 2009, *Communication Power*, Oxford University Press, Oxford.  
Castells, M., 1996, *The Rise of the Network Society. The Information Age: Economy, Society and Culture*, vol. I, Blackwell, Oxford.  
Caune, J., 2000, *Cultură și comunicare. Convergențe teoretice și locuri de mediere*, Traducere de Mădălina Bălășescu, Cartea Românească, București.  
Drăgan, I., Anton, D., Susai-Fuiorea, I., 2002, *Paradigme sociologice ale comunicării*, Editura Tritonic, București.  
Fanego, T., Mendez-Naya B., Seoane, E. (eds.), 2002, *Sounds, Words, Texts and Change*, John Benjamins Publishing Co.  
Gallois, C., Jones, E., Callan, V., Barker, M., 1999, „Strategies of Accommodation”, in *Journal of Language and Social Psychology*, Vol. 18, Nr. 2.  
Giddens, A., 2000, *Consecințele modernității*, Editura Univers, București.  
Giles, H., Coupland, J., Coupland, N., 1991, *Contexts of Accommodation, Studies in Emotion and Social Interaction*, Cambridge University Press.  
Giles, H., St. Clair, R., 1979, *Language and Social Psychology*, Blackwell, Oxford.  
Giles, H., Powesland, P. F., 1975, *Speech style and social evaluation*, Academic Press, London and New York.

- Gudykunst, W. B. (ed.), 2003, *Cross-cultural and Intercultural Communication*, Sage Publications.
- Gudykunst, W. B. (ed.), 2005, *Theorizing About Intercultural Communication*, Sage Publications.
- Guțu, D., 2007, *New Media*, Tritonic, București.
- Held, D., McGrew, A., Goldblatt, D., Perraton, J., 2004, *Transformări globale. Politică, economie și cultură*, Polirom, Iași.
- Jaworski, A., Coupland, N. (eds.), 2006, *The Discourse Reader*, Second Edition, Routledge, New York.
- Larson, C. U., 2003, *Persuasiunea, receptare și responsabilitate*, Polirom, Iași.
- Markova, I., 2004, *Dialogistica și reprezentările sociale*, Polirom, Iași.
- McLaughlin, M. L. (ed.), 1987, *Communication yearbook*, CA, Sage, Beverly Hills.
- McQuail, D., 1999, *Comunicarea*, Institutul European, Iași.
- Meyrowitz, J., 1985, *No Sense of Place, The Impact of Electronic Media on Social Behavior*, Oxford University Press.
- Mucchielli, A., 2002, *Arta de a influența*, Polirom, Iași.
- Noelle-Neumann, E., 2004, *Spirala tăcerii, opinia publică – învelișul nostru social*, Comunicare.ro, București.
- Paillart, I. (coord.), 2002, *Spațiul public și comunicarea*, Polirom, Iași.
- Parsell, M., 2008, "Pernicious virtual communities: Identity, polarisation and the Web 2.0.", in *Ethics and Information Technology*, Vol. 10, No. 1.
- Rheingold, H., 2000, *The Virtual Community: Homesteading on the Electronic Frontier*, MIT Press.
- Runciman, W. G., 1998, *The Social Animal*, Harper Collins Publishers.
- Thompson, J., 1995, *The Media and Modernity*, Polity Press, Cambridge.
- Tomlinson, J., 2002, *Globalizare și cultură*, Editura Amarcord, Timișoara.
- Tracy, K., Haspel, K., 2004, "Language and Social Interaction: Its Institutional Identity, Intellectual Landscape, and Discipline-Shifting Agenda", in *Journal of Communication*, no. 54, pp. 788-817.
- Trend, D. (ed.), 2004, *Reading Digital Culture*, Blackwell Publishing.
- Ting-Toomey, S., 1997, *Communicating Across Cultures*, Guilford Press, New York.
- Ward, C., Bochner, S., Furnham, A., 2003, *The Psychology of Culture Shock*, Second Edition, Routledge, New York.
- Yzerbyt, V., Schadron, G., 2002, *Cunoașterea și judecarea celuilalt, o introducere în cogniția socială*, Polirom, Iași.