

DEVELOPING SKILLS FOR ADULTS IN AN INFORMATION SOCIETY

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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 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.

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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 22-year-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).

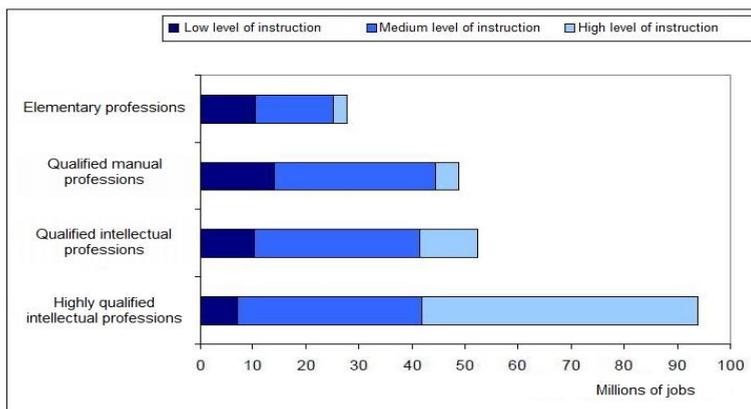


Figure 2. *Jobs design in 2020, depending on the most important professional categories and the training level in the European Union*

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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