Alicja Szerląg

RESOURCEFULNESS IN HIGHER EDUCATION IN THE CONTEXT OF LIFELONG LEARNING IN A SITUATION OF A CHANGE

Annotation. Europeanisation, demanded by the civilization progress, locates the educational discourse within the IT society, which in turn formulates expectations towards the quality of the human capital strengthened by higher education. As a result, it is expected from the graduates to posses competences basing on innovativeness and creativeness, hence – resourcefulness. However, traditionally accomplished process of educating students does not orient towards such competences. Therefore, it is necessary to change the model of academic education. The aim of this article is to indicate the conditions of shaping European model of education in higher education, and in consequence – the range and quality of competences acquired by students. The learning outcomes corresponding with the European directives, particularly in the context of lifelong learning were relevant in these reflections.

Keywords: sustainable development in European Union, civilization characteristic, IT society, lifelong learning, education for resourcefulness, resourcefulness as a learning outcome in higher education.

Introduction: Education – knowledge as capital for sustainable economic and social growth

Postmodern, multicultural and neoliberal sphere of contemporary human life creates new (not) obvious orders, determining the quality of life and development of individuals, communities, countries, continents (Europe in particular), and the entire world. However, at the same time it becomes a threat to the sense of ontological security that is related to the sense of continuity and orders of the events including those reaching beyond direct experience [4] in the essential spheres of life. Hence, it appears indispensible to acquire competences sufficient not only in dealing with the multidimensional sphere (where individual interest are interwoven with the communal priorities – such as the state, European and global ones) but also to face the civilization challenges at the begging of the 21st century. Education provides with such a possibility, as it takes place on various levels and in various forms, regardless of the fact that contemporarily its range and quality is determined by the EU and state policy of a given country (that is a member of the EU community). It explicitly tackles the economic, social and employment policies, that in turn shape the education policy, as altogether they are decisive, determining the condition of the EU within the sustainable growth.

Therefore, the strategic goal of the European Union is to become "<…> a knowledge-based economy, most competitive and dynamic in the world, capable of systematic economic growth, ensuring rise in employment in the circumstances of increased social coherence. In order to achieve such an objective, an overall strategy is prerequisite, as only such approach implies:

Preparation for the shift to society and economy based on knowledge thanks to such policy that would acknowledge information society, research and development, as well as thanks to acceleration of the implementation of structural reforms in favor of the growth of competitiveness and innovativeness as these in turn complete the finalization of the processes linked to the establishment of the internal market;

Modernization of the European social model, investing in so called human capital and fighting with the phenomenon of social exclusion;

Consideration expressed in providing with appropriate economic perspective and opportunities to grow through introducing adequate macroeconomic policy" [3, p. 29].

Emphasising *knowledge–based economy* it is acknowledged that "<…> the productivity, competitiveness and effectiveness are significantly influenced by knowledge, and not by material factors of productions (capital and work resources), or the natural ones (the Earth). Therefore, the countries that undertake effective system transformation towards the knowledge-based economy dominate in the global, extremely competitive economy" [1].

Likewise, Europe of knowledge shall also become "<…> generally recognised and primary factor of social and cultural growth, as well as a factor of consolidation and enrichment of European values, enabling the citizens to acquire competences crucial in dealing with the challenges of the new millennium, making them aware that all Europeans respect

common values and belong to a common social and cultural sphere <…>" [11]. Thus, while projecting and implementing the strategy of a change it must be taken into consideration that the transformation of a contemporary society into a knowledge-based society is accompanied according to the quoted author by distinctive, developmental tendencies.

First of such is referred to as *dematerialisation*. It implies that a significant part of the society is no longer employed within material procession, but in processing the information, as the constantly growing society deals with the information technology on a daily basis, what in turn increases the demand for appropriate education.

The second tendency is expressed in palpable *acceleration* manifested not only by a permanent money market, but also by shortening time needed to design and produce more and more varied and current products or services.

The third tendency is a far-reaching *decentralisation* expressed, among others, by flat structures of management, mainly due to the fact that in production the Just-In-Time (JIT) mode is the most frequently applied, accompanied by lean manufacturing and other systems of organization and managements referring to production and services, cooperating with various types of suppliers networks.

Globalisation as the third tendency is characterised by full openness, independence from geographical location, making competitiveness the main point of reference. As a result it evokes an unavoidable growth in advanced societies that have faced new phenomena and processes conceptualising the spheres of shaping knowledge-based society and economy, implying the following phenomena [16]:

– *new civilization characteristics*, i.e. predominantly technical globalisation that resulted in technisation, informatisation, as well as global networking of people and places;

– *variety* of experiences, levels, structures, potentials of religions, cultures, policies, strategies etc;

– *complexity* expressed in growing complexity of systems, particularly referring to the great technical societies and economies, but also tackling complications of various structures or influences;

– *turbulence* becoming a feature of a contemporary civilization reality that is multi-determined, also concerning international disturbances in the financial systems, conflicts and tensions, natural disasters, unexpected interactions and accumulations of various influences; including mass media;

– *chaotic nature*, i.e. non-continuity, non-linearity, randomness, unpredictability of the new orders – all perceived as the postmodern attributes manifested in the neoliberal reality;

– *kaleidoscopic nature* of the structures and conditions of subjects hindering the identification of causes, also having impact on perceiving changes;

– *virtuality of the human worlds* empowered by the new technologies, manifesting over-local features.

As far as the indicated phenomena and their consequences are concerned, particular attention should be drawn to the *functions* attributed to the information technology [10]. The *educational functions* refer to the global widespread of scientific knowledge and making the society aware of the growing importance of upgrading the qualifications. *Communication functions* tackle the establishment of the new area of establishing social bonds, homogenising the culture and setting up a new type of social relations favouring decrease in sensitivity to cultural, ethnic or religious differences, since the task of the information society is to create for culturally diverse groups the possibility to function within one community at the meeting point of cultures. On the other hand, the *socialisation and activation functions* are manifested in mobilising those permanently or temporarily excluded from the possibility to function freely within a society. Attention is therefore drawn to the opportunity to use - apart from the intellectual potential - telework. *Participation functions*, thanks to new technologies, enable active participation in social life and exercise the election rights, whereas the *organizational functions* establish conditions favouring competitiveness on the market of the widely-perceived teleinformatics, ensuring all the social groups to function fully within. Last but not least, the *protection and control functions* regard the mechanisms of people's and public institutions protection against virtual crime, setting up and monitoring clear standards of functions of all subjects of the information society.

Among the distinguished functions, particular emphasis should be put on the educational function, as education is perceived as a crucial instrument of neoliberal transformations. Therefore, the significance of education and the educational cooperation in development and strengthening steady societies is commonly perceived as a top priority [11]. In such a context, it is worth to mention that the first European document that tackled unprecedentedly the issue of education and youth cooperation as well as education paths and vocational training, i.e. the Treaty of Maastricht on European that entered into

force 1 November 1193 (art. 126 and 127). Moreover, the most significant document directing the development of common European educational area is the Lisbon Agenda devised in 2000, where accent is put on the education preparing for life and work in the knowledge-based economy [3, p. 29].

Accordingly, it is necessary for the European systems of education to adjust to the knowledge-based society and economy, ensuring improvement as for the level and standards of employment, at the same time offering various types of learning and training, addressed first of all to those groups that may be affected by sudden changes on the job market, supporting development of local learning centers, promotion of new, basic skills (particularly within IT) as well as increased clarity of the possessed qualification [3, p. 29].

Lifelong learning – towards resourcefulness

Taking into consideration the occurring changes, lifelong learning became a ground for information society that has been shaped both in general and individual dimension. In the case of general approach, its objective is to contribute to "<…> the development of the European Union as a knowledge-based society, characterised by constant economic growth, increased employment and greater social coherence accompanied by provision of appropriate environmental protection for the sake of future generation" [15], whereas in the individual perspective lifelong learning is understood as "<…> a necessary condition to survive, a biographic imperative in the world <…> of economic rivalry, insecurity, instability and constant changes. Learning becomes a must while dealing with difficult, complex social reality <…>, whereas perception of learning as a lifelong process, taking place in various social contexts and life situations allows one to live in accordance with requirements and challenges of the contemporary worlds [2].

Consequently, it should determine the direction of current reforms of comprehensive, vocational, adult and higher education, as well as influence the process of upbringing taking place among families and the closest social surrounding, with main objective of shaping a new type of a human manifesting creative approach and dynamic attitude to life and culture, hence being able to prefect own self constantly, changing and improving life conditions at the same time [13].

Ergo, the basic principle of lifelong learning is preservation of the continuity and systematic approach towards the process of learning, what in turn ensures constant growth, concurrently protecting against the phenomenon of outdating the possessed knowledge.

Education and growth of each individual should take place multidimensionally, not only within the system of secondary and higher education, but also within adult education and self-learning. Therefore, lifelong learning embraces entire school system and parallel education, adult education and environmental upbringing [12].

In consequence, according to P. H. Combs, it should be accomplished by three types of education [7]:

– *formal learning* – i.e. the one carried out within the framework of hierarchic system of educational institutions, which by certificates and school diplomas select students for the purpose of various social roles, locating them on various levels of social structure,

– *nonformal learning* – including educational activities beyond formal system of education such as courses, trainings, seminars, workshops, conferences, lectures, e-learning and other forms of learning including on the job training, which altogether – if commonly provided and widespread – result in transformation of enterprises into *learning organization* becoming the tool of changes for individuals and organization, that constitutes vital condition to improve the effectiveness of functioning [8, p. 60],

– *informal learning*, referring to the process of acquiring knowledge, attitudes, values and skills derived from common experience, resources and environmental influences, hence it is of *situated, action* or *incidental* character of learning [8, p. 58].

Lifelong learning perceived in such way is not only one of the priorities of the EU contributing to the process of shaping competitiveness of the economy and strengthening the social coherence [6, p. 194] but it also emphasises the nature of higher school education and job market policy that should be oriented at [6, p. 234–235]:

– making job market easily accessible for the students, ensuring high level of their employment,

– maintaining high professional activity of those with various levels of qualification, also at their advanced age.

Nonetheless, accomplishment of the above-expressed expectations significantly depends on the changes of the specificity of education on higher level, that predominately refer to:

1) working out the curricula and syllabuses in a mode that would stimulate students to the lifelong

learning, proving them with competences not only enabling such type of learning, but also making it possible to organise the process of learning for others,

2) change of the teaching cycle referring to the specified learning outcomes within knowledge, skills and social competences, formulated on the basis of the learning outcomes / standards of teaching specified for each field of studies,

3) greater engagement of the employers within the range of defining the learning outcomes and the curricula taking into consideration their needs, but also participating in defining the range and character of vocational practices,

4) improving the quality of offered education, adequate to the needs generated by the job market through implementing internal systems of quality assurances, facilitating the process of verification and validation of the learning outcomes achieved by students,

5) working out a coherent system of recognition and acknowledgment of qualification with reference to the job market.

Implementing the above-mentioned postulates into the educational practices of higher education will definitely orientate the process of educating at students and competences acquired by them in a manner ensuring the sense of safety on the job market after graduation.

Resourcefulness: creativity, knowledge and implementing knowledge practically

In the process of acquiring by students of higher education competences expected on the job market, particular attention should be drawn to, among others, resourcefulness as one of the key competences and features of lifelong learning [17] as this is a quality that implies the ability of an individual to turn ideas into action. The attributes of such a feature embrace innovativeness, creativity, risk taking, as well as the ability to plan and accomplish tasks in order to reach set goals. Consequently, it constitutes a significant support in the practices of everyday individual and social life, whereas as far as employers are concerned it enables them to gain the awareness of the context of their work and skills of taking advantage of the opportunities.

Thereupon, it constitutes a basis for specific skills and knowledge crucial in accomplishing tasks of social or commercial nature [3, p. 139]. For this reason it is essential to define the range of indispensible knowledge, skills and attitudes establishing such a competence [3, p. 139–140].

1. Knowledge. It embraces the accessible opportunities of own personal, professional or/and economic activity, including more general issues, becoming a context of the work and life of others, e.g. general comprehension of the mechanism of economy, chances and challenges that the employers and organizations have to face, etc. Individuals should be also aware of the ethic issues related to the functioning of the organizations and the way in which they can bring about positive changes, to recall fair trade or social enterprises for example.

2. Skills. They refer to the pro-active management of projects (planning, organising, managing, directing and delegating tasks, analysing, communicating, assessing and reporting) also concerning the ability to work individually and in a team. Moreover, the skill to asses own assets and drawbacks, as well as the risk assessment and undertaking steps in justified causes belong to the key skills within this range.

3. Resourceful approach. It is specified by initiative, activity, independence and innovativeness both in private, professional and social life. It also embraces motivation and determination while accomplishing accepted goals – personal, common, private or professional ones.

Nonetheless, analysis of the industrial managers' expectations and, on the other hand, the real competences of the higher school graduation proves there is significant discrepancy as for the specific competences that are part of the resourcefulness range. The greatest discrepancy tackles such competences as: social skills (predominately the ability to work in a team), communication skills, ability of analytical thinking, knowledge within organization and management, international experiences, and methodical knowledge. Besides, it is worth to emphasise that the graduates of higher education present far reaching specialisation that is not expected by the employers whatsoever [5, p. 11].

Therefore, taking into account resourcefulness, the above seems to indicate relatively low coherence between the curricula within higher education and needs generated by the job market. Hence the demand for education that predominantly would teach how to apply knowledge, analytical and critical thinking, activity, creativity and innovativeness, as well as openness, ability to work in a team, problem solving, rising curiosity and understanding social context. Consequently, **creativity, knowledge** and **turning knowledge into action** are the pillars of education oriented at such goals [5, p. 9–105].

Creativity, as first of the pillars of education towards resourcefulness, is, in general, the ability to create something new of out old applying abstraction,

as it combines both logic and fantasy, chaos and order, altogether shaping its dynamic character. However, in order for such condition to occur, it must be accompanied by openness and tolerance, ability to accept criticism, readiness to undertake risk and action, curiosity, flexibility and originality in action, as well as sensitivity to own cognitive processes. Only then it is possible to shift from conventional activity to innovativeness. Hence, an innovator is someone who:

– analyses the solved problem, establishes its structure and tries to find sources of its occurrence, hence such individuals have open attitude towards new challenges;

– knows a lot, learns a lot and gathers experiences as he / she is insightful and penetrating, searching for various sources of knowledge;

– often overlooks and learns how other creative people solve similar problems concurrently being able to adapt knowledge of various backgrounds to the needs of problems being solved;

– thinks how his/her product would look like in the future, what kind of evolution it would be subject to, and to what extend it would be influenced by technical and social trends.

As it results from the above reflections, the creative competences of a given individual are conceptualized by *systematic approach*, *knowledge*, *analogy* and *visions*.

Knowledge, another pillar of the education oriented at resourcefulness constitutes a set of reliable information on reality accompanied by the ability to apply them. It may be differentiated into external and internal, with the first one (so called external knowledge) determined by data and facts that may be processed and stored beyond the mind. The external knowledge is something formalized (e.g. structures, processes or documents) that can be as well referred to as data that could be electronically processed and stored. On the other hand, it is a kind of a "quiet" knowledge, which gathered in the minds of given individuals, is difficult to formulate. Therefore, subjective views and intuition are part of the internal knowledge and are deeply rooted in the experiences and activities of given individuals.

This type of knowledge may be considered as a kind of a know-how. Nonetheless, neither external nor internal knowledge shall be depreciated nor favoured as each is grounded in the experience of a given individual, in their epistemological, ontological and axiological dimensions, i.e. – their individual rationality.

Turning knowledge into action – the third pillar of education – is a process of acquiring knowledge that should be more frequently accomplished by genuine fulfillment of tasks, as in such way knowledge is gained through action and in consequence there is no discrepancy between this what is known, and this what is done.

If the above-mentioned pillars of education, oriented at shaping resourcefulness among students, shall appear within the educational practice of higher education, the competences gained within such processes would be constituted by the following:

– *adaptive* competence; enabling one to act effectively and sufficiently; finding own self on the job market;

– *emancipative*; enabling one to understand the surrounding reality, own actions and their consequences, as well as making choices based on own needs, justification, and values with the awareness of the consequences related to these choices,

– *critical*, enabling one to perceive all kinds of justification legitimising own actions and social or professional practice [9],

– and most of all – **innovative competences**, that are the result of a human creativity, enabling one to introduce new values or qualities tackling accepted goals or ways of their accomplishment within given organization, community or civilization, shaped as, for instance, incremental innovativeness (referring to the diagnostic approach to the organization and projecting systems), business, construction and technological innovativeness, or the revolutionary stand related to the prognostic approach.

Unfortunately, such reading of the resourcefulness in learning outcomes, teaching standards, and in consequence curricula at higher education is hindered, despite the fact that the competences referring to resourcefulness shall be considered crucial for a contemporary man, as in fact they determine the quality of the expected economic and social transformation within EU.

Conclusion

The improvement of difficult situation within education may be influenced by working out the National Framework of Qualifications referring to the European Qualifications Framework. Their implementation should result in significant improvement including [14]:

increase in the access to educational proposals and various forms of support enabling lifelong learning,

support for educational institutions out of the system of education,

increase of mobility of those learning and teaching.

In most of the European countries which authorities decided to work out and implement the National Framework of Qualifications this tool became a catalyser of necessary changes and innovations aiming at the establishment of clear and efficient systems of qualifications taking into consideration – in conformity with the lifelong learning paradigm – possibility to reach the qualifications using various paths, i.e. on the way of formal or non-formal education. Therefore, efforts to improve education on higher level by making studies accessible to all those who gained specified learning outcomes in other than formal manner of education are advanced.

Nonetheless, accomplishment of such objective significantly depends on the revision of views on the goals of teaching on higher level that are held by those, who participate in such a process. Therefore they should bear in mind that there is no other educational alternative but to implement innovativeness and competitiveness, i.e. the attributes of the knowledge-based societies and economies.

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Summary

Alicja Szerląg

AUKŠTOSIOS MOKYKLOS ŽMOGIŠKIEJI IŠTEKLIAI MOKYMO(SI) VISĄ GYVENIMĄ KONTEKSTE POKYČIŲ LAIKOTARPIU

Europos Sąjunga reikalauja nuolat peržiūrėti darbuotojų kvalifikacijas, nes žinių visuomenės imperatyvas – konkurencingumas ir inovatyvumas. Tam reikalinga nauja mokymo, ypač aukštojo mokslo, sistema. Naujojo mokymo pagrindu turi būti kūrybiškumas ir praktinis žinių pritaikymas. Būtina atsižvelgti į nacionalinius kvalifikacijų sandaros pokyčius, atliepiant Europos kvalifikacijų sandarą tiek stuktūriniu, tiek turinio lygmenimis.

Raktiniai žodžiai: tvarus vystymasis ES, civilizuotumo bruožai, mokymasis visą gyvenimą, žinių visuomenė.

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