

# A Review of Lifelong Learning as Natural and Cultural Phenomenon

Anna Frąckowiak<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Associate Professor, PhD, Kujawy and Pomorze University in Bydgoszcz, Faculty of Social Sciences and Philology, Chair of Andragogy and Social Pedagogics, ul. Toruńska 55-57, 85-023 Bydgoszcz, e-mail: <u>anfrackowiak@onet.pl</u>

#### Abstract:

Lifelong learning is mostly analysed as political and educational concept. However it is worth to look at it through different lenses, namely, the cultural ones. After short description of natural basis to learning in life span, especially neuroplasticity of the brain, cultural dimensions of the process are discussed. The author took anthropologist point of view first, to see the concept as a whole – separate culture (values, language, symbols, rites of passage). Then, humanistic and neoliberal discourse (commonly called paradigm shift) of lifelong learning is shown as some kind of sub-cultures, where issues of values, human position in both stances. Strong and multidimensional relations between culture and lifelong learning are underlined. In the end an attempt to answer a question – "what varieties of lifelong learning culture can we speak about?" is taken.

Keywords: lifelong learning, nature, neuroplasticity, culture, humanistic/neoliberal discourse

### Introduction

Lifelong learning is the most known and popular idea of the present time. Its broad meaning brings different views and practice in consequence. Diversity is nothing strange, rather potential, but there are situations when the lifelong learning concept is mistakenly understood or even distorted. Two main stands are the most popular in international discussions - the humanistic and economic (neoliberal) one (Field 2009, Barros 2012). The first one is often called utopian, the second one - practical. Humanistic vision of lifelong learning emphasizes human development, personal growth, deepening knowledge, getting new interests etc. (Elfert 2015; 2016). However, nowadays lifelong learning is mainly a political and economic concept. It is explained and researched as a factor contributing to social and enterprises development, better economy growth, skills development and better education-labour market launch (Kang 2007; Regmi 2015). It is perceived in terms of human capital and neoliberalism, paying special attention to practical and financial profits from learning. This vision is relevant to training of given working groups, with the most popular research and proposals for teachers (Boyd 2005), nurses (Lifelong... 2010), physiotherapists (de Caro 2012) and managers (Murray & Raper 2007) training, usually using ICT (Halberg, Mozelius & Meegamman 2011).

The aim of this paper is to stress natural as well as cultural significance of lifelong learning process and point the relation between those two. Deliberating on the essence of learning in lifetime and its cultural diversity, both concept and practice, reach far beyond discussion on humanistic and neoliberal "paradigms".

#### Natural basis to lifelong learning

## Neuroplasticity of the brain

Lifelong learning is often discussed as one of the most interesting concepts, leading to knowledge society, but we should perceive it primly as a natural process. Learning is one of the mechanisms of human development, experience acquisition in everyday life, based on reflection and making conclusions of the experience. As research in neuroscience and psychology of learning clearly show its validity and possibilities throughout our life, we no longer doubt in its power. The growing importance of non-formal and informal learning, and its results recognition procedures in formal education, proves growing awareness of unorganized learning. In fact, it is still rediscovered by adult educators, since learning is natural process, that may happen anytime, anywhere.

Scientific concepts about learning in adulthood date back to the beginning of the 20<sup>th</sup> century, when authors like Basil Yeaxlee, who published his famous book "Lifelong Education" in 1929, and psychological experiments, contributed to conviction that adults can learn and entailed growing interest in adult education. Previously adult person was perceived as completed, in the sense that he/she is mature, educated and things he/she knows are sufficient for his/her further personal life and vocational career. This view was grounded in common conviction of the society as well as neurological knowledge about brain functioning. Denying adults the right to learn was also caused by connecting the process of learning with formal education. Advances in neurological knowledge elicited adult education and let it grow as a serious sector of educational system and policy.

A key word in analysing natural basis to learning in life span is "neuroplasticity". "This is due to the process by which connections between neurons are strengthened when they are simultaneously activated [...]". (Brain Waves 2, 2011, p. 5) Our activities, social interactions and obviously learning, changes how the brain works and changes connections between neurons. However neuroplasticity may act twofold (Gugielman 2012). When we learn it helps to set new connections or thicken those which already exist. But when we stop learning or cease some kind of previous activity, neuroplasticity means disappearance of some connections in favour of the used ones.

Taking into account neurobiological foundations of learning through life span, another issue should be raised. Generally, research and debate about lifelong learning concerns healthy people. Where are those, who are disabled or have to face temporary constraints in their daily functioning and need rehabilitation? As Kesselring (2014) states, people who experienced brain or neurological injuries, due to specific exercise, may reorganize their neurological pathways, in order to function normally. "Adult patients should be allowed to use similar mechanisms, which in childhood have led to success, *viz.* normal behaviour." (p. 143) The essence of life-long learning truly reveals in case of adults, children and the elderly learning in situation of body/brain injury and the process of recovering from it.

## Natural learning or informal learning?

There is also one important thing we should remember – people were learning during lifespan for ages, even if they were truly not aware of the process. Since the power to decide what is knowledge and what is not, what kind of knowledge is valuable, which is not – was given to school and university – adults were not perceived as able to learn. But we should not forget that learning is primarily natural process.

What is the difference between natural and informal learning? Natural and informal learning are very close to each other, based on experience, observation, active listening, trial and error, drawing conclusions from one's own and other people's experience, etc. However informal learning is more about reflecting on the process of learning and being more conscious that learning just happened. Top theories of adult learning underline the role of

reflexion (see Kang 2007 for example). We should step back to Dewey who wrote, that experience without reflexion is somehow unfinished, uncomplete. (Dewey 2007)

There is also something we could call "double learning" or "semi-natural learning". It is revealed in situation when someone who teach adults (adult educator) takes part in course advancing his/her teaching skills. The process of learning is thus twofold – firstly, the official content of the course is brought to the front, secondly, teachers (as learners) analyse (more or less consciously) their teacher's behaviour during the course they participate in. Teachers (as learners) think of their educator's features and assume if they would like to behave like him/her or not. They analyse what could they incorporate into their practice or reject. Sometimes they are inspired by something during the course (for example a given method) or become aware that they do not want to be treated in a given way, so in consequence they can improve their teaching and relationship with their learners. Interesting qualitative research on switching teachers-learners role and its effects for improving teachers practice on the basis of critical reflection was conducted by Georgia Efthymiou and A. Eugenia Panitsides (2016).

### Lifelong learning from cultural perspective

Apart from being natural, lifelong learning is also cultural process. If we discuss this phenomenon from the anthropologist point of view, where culture is defined as something people think, do and possess as members of society. "Culture consists of patterns, explicit and implicit, of and for behaviour acquired and transmitted by symbols, constituting the distinctive achievements of human groups, including their embodiment in artefacts; the essential core of culture consists of traditional (i.e. historically derived and selected) ideas and especially their attached values; culture systems may, on the one hand, be considered as products of action, on the other, as conditional elements of future action." (Kroeber & Kluckhohn 1952, p. 181)

And now question arises – what are cultural features of lifelong learning, in terms of values, rituals, language, and symbols?

## Values

Considering lifelong learning from anthropological perspective, values underlying different visions of the concept come to the front. In the humanist view, represented mainly by UNESCO and authors publishing in that trend, the main values are: freedom, human development, life quality, personal enrichment, right to learn, breaking down barriers to learning, equality in access to education (especially for those, who are somehow excluded from society), social sustainability etc. According to Elfert (2015) the most known reports – one edited by Edgar Faure (1972) and the second one edited by Jacques Delors (1997), present the humanist view on lifelong learning, actually lifelong education. Both comment on changes in society and labour market, highlighting the individual, but in the broader context of community. In the neoliberal view, represented mainly by OECD, European Commission and World Bank (Kaya 2014, Barros 2012), the most important values are: skills advancement, professional development, career, economic success, measurable benefits from investment in education, practical profits, individual responsibility, adaptation to changing world of work etc.

International Journal of Psycho-Educational Sciences, Volume (6) Issue (2), September, 2017

Hence, only the humanistic view deserves to be called lifelong learning concept, for learning is understood not only as lasting throughout life, but also life-wide and in-depth (Belanger 2016). The neoliberal one, because of its narrower perspective, should be rather called continuing education and be perceived as one of the elements constituting the concept of lifelong learning. However some authors claim, that neoliberal vision of lifelong learning is not only about money. On the basis of research conducted in Malaysia (Ting et. al. 2015), stand that "[...] it is more economically worthwhile to support lifelong learning programmes aimed at professional development as it brings both economic returns and personal growth benefits to the participants." On the other hand, people who attended non job-related courses, made some economic profits, like setting their own small business. (Ting et al. 2015) In fact it is wider problem. Neoliberal stance focuses on job-related learning strictly linked to expected skills advancement, usually ignoring informal or natural learning incidents that contribute to work performance. Employers hardly invest in learning that is not linked to competences needed in work environment.

### Rites of passage

In human development throughout life span we may find milestones, that could be interpreted from anthropologist point of view as rites of passage. It happens in personal, vocational and social life, and lifelong learning seems to be crucial for those moments.

While the European and Northern American culture are more individualized, paying attention to human development with assistance of some socio-economic factors, the African and Asian cultures are more about community and family as primary factors that let people develop their personality. One of the examples that shows why some lifelong learning programs fail to achieve expected results, when ignoring culture, are herders in Lesotho, described by Pitikoe & Morojele (2017). They underline the notion of indigenous knowledge, defined as "being oral, context-specific, and passed on through generations." (p. 40) This kind of knowledge, grounded in culture is very important for males in Lesotho, and it is also connected with rites of passage. Authors point out that literacy programmes do not fit herders' life as they frequently drop out of the programmes, because of living in a nomadic style.

This is why lifelong learning should not be narrowed only to what is offered in formal and non-formal programmes, whether job-related or personal interests-related. What we learn during our life in natural way (e.g. by observing others) or in informal way (by stories, advice given by others) is of most importance and impacts other forms of learning.

## Language and symbols

Although humanistic and neoliberal vision of lifelong learning use different rhetoric, the effect is much the same - language used in both those stances is positive. Lifelong learning is encompassing all society, it is suitable for everyone, no one is privileged to learn, although more radical interpretations point that lifelong learning rather strengthens those who already benefited from education.

According to Elfert (2016), the two most known reports presenting UNESCO's humanist vision of education, namely the Faure's (*Learning to be*, 1972) and Delores' report (*Learning: the treasure within*, 1996), were response to the narrow, economic perspective on education and the rise of neoliberal ideology. Hake (2015, p. 10) denies this commonly

accepted interpretation of the Faure's report. On the basis of the report's language analysis, he argues that "Faure talked the neo-liberal language of employability and flexibility among the workforce, or 'learning for earning'."

Signs, words, buildings, places and persons may constitute symbols. What kind of symbols are aligned to lifelong learning? Shortcut "LLL" is first thing that comes to mind, widely promoted and accepted, although when in educational analyses life-wide and life-deep concepts appeared, it is used less frequently, with clear prevalence of term "life-long" learning. Next, "learning from cradle to grave" very often cited by authors when lifelong learning is defined, to underline what "life-long" really means. In like manner "learning anytime, any space" appears, especially when an author of a given paper elaborates on ICT in lifelong learning context. Hardly ever may we find a paper on lifelong learning without key names of Edgar Faure, Jacques Delors, Paolo Freire or Julius Nyerere, and key organizations, like UNECO, European Commission, World Bank or OECD. And finally, words strictly connected to lifelong learning analyses: "development", "sustainability", "advancement", "rapid change", "keeping pace", "growth", to name just a few, which also work as symbols.

Over 50 years of lifelong learning intensive discussions, resulted in broad language elements connected with the concept. Change of rhetoric, commonly called "paradigm shift", draw attention not only to different issues in learning through life, but also how it is understood and practised.

## Cultural differences in lifelong learning perception

## Creating different cultures of lifelong learning

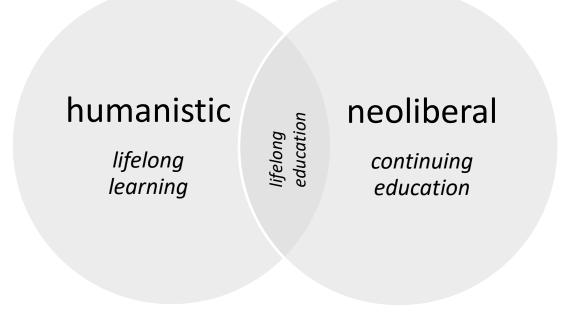
One of the crucial features of lifelong learning is its diversity. As stated in the Faure's Commission report (1972, p. 205), there are many faces of adult education. "For a very large number of adults in the world today, it is a substitute for the basic education they missed. For the many individuals who received only a very incomplete education, it is the complement to elementary or professional education. For those whom it helps respond to new demands which their environment makes on them, it is the prolongation of education. It offers further education to those who have already received high-level training. And it is a means of individual development for everybody. One or other of these aspects may be more important in one country than in another, but they all have their validity." Can we also speak of many faces of lifelong learning?

There is a thorough discussion on what does the shift from education to learning really means and the possible tension between humanistic and neoliberal view on lifelong learning. Whilst the concept of lifelong learning is more about personal development, a part of which is also skill advancement in formal and non-formal settings, continuing education is more about formal education and professional development, with knowledge acquisition and personal growth as side effects. In humanistic vision human is someone who adapts to current situation, but also creates new conditions, in the neoliberal one, human is someone who adapts to the society and labour market and being creative is usually neglected feature. In neoliberal stance, attention in drawn to interests of the labour market and needs of employers, not individuals - employees (Kaya 2014). Although neoliberal stance underlines that people should be responsible for their lives and take life in their own hands, it actually leaves people alone. The responsibility really means paying for professional development and vocational

training on their own, with little help from employers, not to mention the state. Treating learning as private good denies education and learning as human right. The most distinctive disadvantage of neoliberal stance is that it accentuates and overestimates instant economic benefits and return from investment in suitable (for employers) vocational training. While it underestimates, perhaps slower, but visible and also important effects of informal learning in daily life or informal learning at work, which in time may also bring financial profits – for the employer and employee as well. According to Kaya (2014, p. 66), benefits from lifelong learning in neoliberal version are not so easily measurable and are rather some kind of promise, "just a hope for but not the guarantee of being employed, finding a better job or having advancement."

In author's opinion, relations between education and learning, humanistic and neoliberal, should be like that:

Diagram 1. Lifelong learning discurse



Source: author's own concept

The main differences between humanistic and neoliberal vision of lifelong learning are pointed by Regmi (2015, pp.142; 136). The assumptions underlying humanistic paradigm are: citizenship education, social capital and capability, whilst in neoliberal paradigm: competitiveness, privatisation and human capital.

Kang states that "[t]he focus on lifelong learning has shifted from humanitarian to economic objectives." (2007, p.207) In some way he is right taking into account current situation where neoliberal discourse prevails the humanistic one. It is comfortable for many governments to use neoliberal discourse, invest in adult vocational training (often equalized to lifelong learning) and measure the input – output relation. However, we should not forget the humanistic vision of lifelong learning. Stating that humanistic point of view is obsolete,

jeopardizes not only human, adult education and lifelong learning development, but society as a whole and also economy, as one of the element of society's culture.

### Culture as foundation of lifelong learning

Although lifelong learning may be seen as a concept concerning learning throughout the whole human's life, particular countries accentuate different aspects of the process, according to cultural basis. For example in Malaysia, lifelong learning is understood as education of people 15+. Moreover, full-time students (at schools, colleges, universities) are excluded from the category, and only adults taking courses offered especially by community colleges are treated as lifelong learners (Ting et al., 2015). Likewise in other countries, lifelong learning is frequently identified with adult learning, but with stronger accent on jobrelated programmes, literacy, civil education, language education etc., according to society and its culture in a given country.

Despite discussions and tensions between humanist and economic vision of lifelong learning, there are also cultural differences in its understanding. Julia Preece (2014) argues, that African perspective on lifelong learning differs from the North one, represented mainly by the European Union and the United States. As she assumes, the language of lifelong learning policy promoted in the North, is a new kind of colonialism, and it results in muting other voices and views grounded in a given culture, in which people perceive the world, relationships and the process of learning in another way. She states that "the difference for continents like Africa is that there is an assumption in the international development aid agendas that the South is not able to speak for itself and has no learning history of its own." (2014, p. 5). In a global perspective it causes real problems with a rhetoric used in documents promoting lifelong learning. Ignoring peoples' traditions, language, mind-set and values, grounded in their culture leads to the concept of lifelong learning's failure, not development.

Relations between culture and lifelong learning are complex. According to Field (2004), there are at least three dimensions of that kind of relation. First, how culture is influencing lifelong learning in terms of stressing selected learning pattern/s. Second, learning is also impacting on culture, because things people learn may change themselves and in effect it changes cultural patterns. Third, culture is changing under different conditions, whether in slow, evolutionary or rapid way. Thus, learning in long perspective of human life and culture (in broader understanding) are intertwined. Taking into account narrower understanding of culture as different domains of art, it makes human life multidimensional, and lets for fulfilment of spiritual needs. Arts, culture and creativity are crucial aspects in todays' societies development and human condition in contemporary changing world (Laal, Aliramaei, Laal 2014). This is why the concept of lifelong learning should be analysed on different levels of culture understanding.

#### Conclusion

The rising popularity of lifelong learning concept is based mainly on neurobiological research outcomes into human brain and capacity to learn due to neuroplasticity, as well as growing number of programmes aimed at human personal or vocational development. The process of natural learning has been re-discovered by adult educators, institutions, international organizations and politics and harnessed into structures of societies' functioning.

As Field (2004, p. 7) states "[f]ar from being too broad, its scope at present is usually too narrow, tending as it does to treat informal and non-formal learning somewhat sketchily and crudely, before returning to the familiar terrain of more institutionalised forms of learning."

Lifelong learning tends to be a concept based on such values as equality, democracy, freedom, inclusion, quality, social justice, sustainability, skill advancement, human capital development, etc., which are differently chosen and accentuated, according to humanistic or neoliberal view. It could be also perceived as a human right and as Patrick Blessinger (2015) claims, on the example of higher education "[...] lifelong learning must be based on a democratic vision of higher education, that is diverse, inclusive, representative and rooted in an ethos of political, social and economic justice." This is some kind of idealistic view on lifelong learning, however if we do not seek this ideal, a discrepancy may occur between the promise of learning benefits and the reality.

Another issue is cultural dimension/s of lifelong learning concept. Is there something like culture of lifelong learning? In what sense can we speak of culture of lifelong learning – from anthropological point of view - as one of many cultures (like global, national, local, youth culture, i.e. kind of subculture?) or like culture in itself? In the analyses showed above, lifelong learning in cultural perspective is presented on different levels, and relations between learning in life span and culture are complex. Lifelong learning could be perceived as culture in terms of its own values, language, symbols, and rites of passage. On the other hand, it could be seen as sub-culture, when humanistic and neoliberal discourse is taken into account. Last, interplay between lifelong learning and culture, as indicated by Field (2004) is of crucial role in understanding todays lifelong learning discussion and future development of the concept.

In the context of these discussion, some critic is expressed towards lifelong learning. Although generally it is useful concept in a very positive sense, there is also dark side of it. A notion lies behind the concept of lifelong learning that human being is always incomplete, always unadjusted to society where he/she lives and always late to rapidly changing world. But things do not change for themselves. It is human who changes things, begins or ceases changes, creates and destroys.

The most common mistake in discussions concerning lifelong learning is analysing only adults' learning process, possibly the elderly. Adults and the elderly's learning is certainly part of the lifelong learning process. However, authors reporting their research outcomes into those groups or describing innovation projects in communities, should not write about lifelong learning but adult education or the elderly's education as a part of the lifelong learning process. Although academics who are theoretically and practically interested in lifelong learning, perfectly know what the process is, usually write about adult education or the education of the elderly. It is understood that lifelong process of learning is the most visible and easiest to catch in adulthood. But we should be aware, that the true process of learning throughout human's life needs to be researched and analysed, from childhood to seigniorial age. That is why the best way to research the process of lifelong learning are longitudinal studies. Although it needs time, at least 25 years, the kind of research project would show learning throughout lifetime in its specifics as well as would shed some light on social and personal factors underlying successful learning.

International Journal of Psycho-Educational Sciences, Volume (6) Issue (2), September, 2017

Guy Claxton & Bill Lucas (2009, p. 5) remark that: "Babies learn their mother's smell. Toddlers learn to walk. Children learn the layout of their new schools and the habits of their teachers. Teenagers experiment with a range of 'possible selves' – they throw out exploratory tendrils of identity into which they might want to grow (at the same time as they are learning about photosynthesis or the causes of the First World War). Adults learn new skills and vocational forms of speech, the rigours of parenthood and the regulation of their emotions. The elderly learn how to enjoy slower pleasures, to cope with infirmity and to face their own death." This citation reflects also author's stance about lifelong learning in explicit words.

#### **References:**

- Barros, R. (2012). From lifelong education to lifelong learning. Discussion on some effects of today's neoliberal policies, *European Journal for Research on the Education and Learning of Adults*, 3(2), 119-134.
- Belanger, P. (2016). *Self-construction and Social transformation. Lifelong, Lifewide and Life Deep Learning.* Hamburg: UNESCO Institute for Lifelong Learning.
- Blessinger, P. (2015). Lifelong Learning as a Human Right. *Higher Education Tomorrow*, Volume 2, Article 1, retrieved from <u>http://www.patrickblessinger.com/lifelong</u> <u>learningas-a-human-right/</u> [27.05.2017]
- Boyd, S. (2005). Teachers as lifelong learners, A paper presented at NZARE, Dunedin, retrieved from <u>http://www.nzcer.org.nz/system/files/14717.pdf</u> [2.07.2017]
- Brain Waves 2: Neuroscience: implication for education and lifelong learning. (2011). London: The Royal Society.
- De Caro, J.X. (2012). *Towards a lifelong learning culture*. The ENPhE Lifelong Learning Focus Group Final Report, Enschede.
- Claxton, G. & Lucas, B. (2009). School as foundation for lifelong learning: The implications of a lifelong learning perspective for the re-imagining of school-age education, Inquiry into the Future of Lifelong Learning, Leicester: NIACE.
- Dewey, J. (2007). How We Think, New York: Cosmo Classic.
- Efthymiou, G. & Panitsides, A.E. (2016). *In-between the Educator/Learner Role within the Context of Lifelong Learning: A Qualitative Study*. Conference Paper, Interrogating transformative processes in learning and education: An International Dialogue: A New European Society for Research on the Education of Adults (ESREA) Network, 2<sup>nd</sup> Conference Theme: The Role, Nature and Difficulties of Dialogue in Transformative Learning, June 24-26, Athens, Greece.
- Elfert, M. (2015). *Looking at Lifelong Learning through the Lens of Anachronism*, retrieved from <u>www.researchgate.net</u> [27.05.2017]
- Elfert, M. (2016). Revisiting the Faure Report (1972) and the Delors Report (1996): Why was UNESCO's Utopian Vision of Lifelong Learning an "Unfailure"?, 2016 ESREA Triennial Conference, Maynooth, Ireland Symposium "Past Futures - Learning from Yesterday's Imaginations", retrieved from <u>www.researchgate.net</u> [24.05.2017]
- Faure, E. (1972). Learning to be. The world of education today and tomorrow, Paris: UNESCO.

International Journal of Psycho-Educational Sciences, Volume (6) Issue (2), September, 2017

- Field, J. (2004). Lifelong learning and cultural change: A European Perspective, conference paper, Conference on Lifelong Learning and New Learning Culture, National Chung Cheng University, Chia-Yi, Taiwan, 1-2 October, retrieved from www.researchgete.net [24.06.2017]
- Gugielman, E. (2012). The Ageing Brain: Neuroplasticity and Lifelong Learning. *eLearning Papers*, no. 29, pp. 1-7.
- Hake, B.J. (2015). *Much in Little? Revisiting 'lifelong education', 'recurrent education', and 'de-schooling' in the age of 'lifelong learning', conference paper, retrieved from www.researchgate.net* [27.05.2017]
- Halberg, D., Mozelius, P. & Meegammana N. (2011). *Lifelong Learning: Telecentres in Semi -rural Areas as a Bridge between Formal, Non-formal, and In-formal Learning,* conference paper, retrieved from www.reseachgate.net [24.05.2017]
- Kang Joong, D. (2007). Rhizoactivity: toward a postmodern theory of lifelong learning, *Adult Education Quarterly*, 3(57), pp. 205-220.
- Kaya, H. E. (2014). Lifelong learning: As for living or a living, European Journal on Research on Education, Special Issue: Educational Technology and Lifelong Learning, pp. 62-66.
- Kesselring, J. (2014). Neuroplasticity Basis for Lifelong Learning, *European Neurological Review*, vol. 9(2), Editorial, p. 143.
- Kroeber A.L. & Kluckhohn A. (1952). *Culture: A Critical Review of Concepts and Definitions*, Cambridge: Peabody Museum of American Archeology and Ethnology.
- Laal, M., Aliramaei, A. & Laa, A. (2014). Lifelong learning and art, *Procedia Social and Behavioral Sciences*, vol. 116, pp. 4047-4051.
- Lifelong Learning in Medicine and Nursing. (2010). Final Conference Report, Association of American Medical Colleges, American Association of Colleges of Nursing, Josiah Macy Foundation, Washington D.C., retrieved from http://www.aacn.nche.edu/education-resources/MacyReport.pdf [2.07.2017]
- Murray, S.L. & Raper, S. A. (2007). Encouraging Lifelong Learning for Engineering Management Undergraduates, *Proceedings of the ASEE Annual Conference and Exposition*, Honolulu: American Society for Engineering Education (ASEE).
- Pitikoe, S. & Morojele, P. (2017). Indigenous Knowledge/s of Survival: Implications for Lifelong Learning among the Basotho Herding Fraternity, *Educational Research for Social Change*, 6(1), pp. 38-55.
- Preece, J. (2014). *Africa and international policy making for lifelong learning: Textual revelations*, retrieved from <u>www.researchgate.net</u> [27.05.2017]
- Regmi, K.D. (2015). Lifelong learning: Foundational models, underlying assumptions and critique, *International Review of Education*, vol. 61, pp. 133-151.
- Ting Su-Hie, Siti Halipah Ibrahim, Rohaida Affandi, Azhaili Baharun, Wan Azlan Wan Zainal Abidin, & Edmund Ui-Hang Sim. (2015). Lifelong Learning for Personal and Professional Development in Malaysia, *Catalyst*, 12(2), 6-23.