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Functional Literacy in the System of Adult Education Alfabetyzacja funkcjonalna w systemie kształcenia dorosłych

ABSTRACT

RESEARCH OBJECTIVE: The scientific aim of the article is to improve understanding of functional literacy (illiteracy) phenomenon and its role in adult learning system, pedagogical and socio-economic approaches to this concept.

THE RESEARCH PROBLEM AND METHODS: The research problem is included in the questions: What are the essence, definition and constituents of functional literacy? What are pedagogical principles and techniques of functional literacy training for adults? The author uses the method of theoretical analysis of scientific works, some documents and UNESCO reports on the issues, and comparison of certain research views.

THE PROCESS OF ARGUMENTATION: The article starts with investigation of functional literacy in historical and contemporary dimensions, the reasons for development of the phenomenon in the world. Then we focus on various concepts and approaches to the functional literacy through the time. The next is comparison of scholars' research on the components of functional literacy; and then we study the principles and methods, peculiarities of functional literacy training in adult education.

RESEARCH RESULTS: The research has revealed that functional literacy is a complex of social necessary knowledge and skills allowing a person to participate effectively in social process. Its constituent elements are basic, information, economic, political, cultural literacy, and many others depending on community level. Functional literacy concept and training are connected with the priorities of economic and social development. The constant interest by national and international organizations for maintaining functional literacy is explained in the work.

CONCLUSIONS, INNOVATIONS AND RECOMMENDATIONS: The conclusion emphasizes the importance of functional literacy for development and well-being of individual and societal progress in the community. The need for working out and implementation of specific principles, teaching materials and techniques for functional literacy training in adult learning is highlighted.

→ KEYWORDS: FUNCTIONAL LITERACY, ILLITERACY, ADULT LEARNING, PEDAGOGICAL PRINCIPLES, UNESCO



STRESZCZENIE

CEL NAUKOWY: Celem naukowym artykułu jest lepsze zrozumienie zjawiska alfabetyzacji funkcjonalnej (analfabetyzmu) i jego roli w systemie uczenia się dorosłych, podejścia pedagogicznego i społeczno-ekonomicznego do tego pojęcia.

PROBLEM I METODY BADAWCZE: Problem badawczy zawiera się w pytaniach: Jaka jest istota, definicja i składowe alfabetyzacji funkcjonalnej? Jakie są zasady pedagogiczne i techniki treningu funkcjonalnego czytania i pisania dla dorosłych? Autorka posługuje się metodą teoretycznej analizy prac naukowych, niektórych dokumentów i raportów UNESCO na ten temat oraz porównania niektórych poglądów badawczych.

PROCES WYWODU: Artykuł rozpoczyna się od zbadania piśmienności funkcjonalnej w wymiarze historycznym i współczesnym, przyczyn rozwoju tego zjawiska na świecie. Następnie skupiamy się na różnych koncepcjach i podejściach do umiejętności funkcjonalnych na przestrzeni czasu. Dalej porównano badania naukowców nad składnikami alfabetyzacji funkcjonalnej oraz omówiono zasady i metody, osobliwości treningu umiejętności funkcjonalnych w kształceniu dorosłych.

WYNIKI ANALIZY NAUKOWEJ: Badania wykazały, że alfabetyzacja funkcjonalna to zespół niezbędnej społecznie wiedzy i umiejętności, pozwalających osobie skutecznie uczestniczyć w procesie społecznym. Jego elementy składowe dzielimy na podstawowe, informacyjne, ekonomiczne, polityczne, kulturowe i wiele innych, w zależności od poziomu społeczności. Koncepcja i trening umiejętności funkcjonalnych są związane z priorytetami rozwoju gospodarczego i społecznego. W pracy wyjaśniono stałe zainteresowanie krajowych i międzynarodowych organizacji utrzymaniem umiejętności funkcjonalnych.

WNIOSKI, INNOWACJE, REKOMENDACJE: W konkluzji podkreślono znaczenie umiejętności funkcjonalnych dla rozwoju i dobrostanu postępu indywidualnego i społecznego w społeczności. Podkreślono potrzebę wypracowania i wdrożenia konkretnych zasad, materiałów dydaktycznych i technik treningu umiejętności funkcjonalnych w kształceniu dorosłych.

→ SŁOWA KLUCZOWE: ALFABETYZACJA FUNKCJONALNA, ANALFABETYZM,
UCZENIE SIĘ DOROSŁYCH, ZASADY PEDAGOGICZNE,
UNESCO

Introduction

The central aim of the education is considered as preparing citizens to functioning in the modern society. At the beginning of the 21st century in the world educational system, such aim not just keeps its actuality, but gets a new meaning. The labour markets of many countries pose quite high requirements to the specialists of any sphere of economy, and in the information society, a tendency to decreasing amount of low-qualified workers appears. So, full functioning in modern society requires highly developed knowledge and skills, i.e. possessing *functional literacy* (FL). Besides, the rapid growth of volume and

complexity of knowledge in the information society constantly changes the minimum requirements for the individual's FL. Therefore, the lack of these skills and low level of acquired knowledge are becoming factors of the functional illiteracy phenomenon.

The problem of functional literacy attracted attention of scientists and practitioners at the end of last century due to the contradictions between the level of professional training of the graduates and their inability to implement professional and social functions adequately in conditions of constant complication of information, communication and technological resources. On the other hand, the spread of FL was associated with the inconsistency of educational results with the requirements of modern information society (technological, informational, and communicative) (Bugaievska, 2012).

So, we will try through the analysis of scholars' researches, UNESCO documents to investigate the essence of the functional literacy concept, its role and development opportunities, and some historical and contemporary aspects of FL in the global dimension. Moreover, studies of certain principles and technics of functional literacy training in the system of adult education, and pedagogical approaches to it, all are important for working out strategies for preventing the functional illiteracy.

Functional literacy: historical and contemporary dimensions

According to D. Shaw et al. (2017), the concept of literacy as a utilitarian tool appeared in 1942 in the US Army. During World War II, the US Army introduced the term "functional literacy" to indicate adults' ability of using written instructions to properly perform basic military functions. Thousands of draftees were deferred because they were not able to understand "the kinds of written instruction [...] needed for carrying out basic military functions or tasks" (Shaw et al., 2017). In 1947, the US Bureau of the Census began defining literacy quantitatively, describing anyone with less than five years' schooling as functionally illiterate (Functional literacy).

From very inception of the UNESCO in 1946, the adult literacy promotion was included in its agenda, and universalization of literacy became the part of UNESCO's commitment. In 1949, the UNESCO set the generalized functionality of literacy. The acquiring of reading and writing skills was considered "as basic rights: people should be enabled to become functionally literate in their own culture" (Vágvölgyi et al., 2016). Originally UNESCO assigned to adult literacy the function of engendering the most generalized and crucial functionality among adult learners. Since a large part of the global population were bypassed by education systems, and never learned, adult education system should provide in these areas adult literacy promotion. So, than and today UNESCO has ever been and remains the responsible keeper in regard to the universalization of literacy in the world.

Initially, the term "functional literacy" was defined for UNESCO by William S. Gray in "The Teaching of Reading and Writing", 1956, as the training of adults to "meet independently the reading and writing demands placed on them" (Gray, 1956). After the World Congress of Ministers of Education on the Eradication of Illiteracy that took place



in Teheran in 1965, the world interest in FL training got stable growth, and efforts of Member States to realize it multiplied considerably. In the era of new technological, political, and scientific developments, national interests in literacy increased, and FL was recognized to be more than an elementary skill and became important for economic prosperity and country's advancement (Shaw et al., 2017).

A necessity in a standard definition to differentiate between literates and non-literates and to distinguish their levels was realized at the UNESCO General Conference in 1978. It was concluded that

[...] a person is functionally literate who can engage in all those activities in which literacy is required for effective functioning of his group and community and also for enabling him to continue to use reading, writing, and calculation for his own and the community's development. A person is functionally illiterate who cannot engage in all those activities in which literacy is required for effective functioning of his community and also for enabling him to continue to use reading, writing, and calculation for his own and the community's development (UNESCO, 1979, p. 183).

Twenty years later at mid-1990s the concept of generalized functional literacy as a combination of literacy, functionality and awareness was accepted by UNESCO's Inter-agency Commission to be considered as "a life skill and primary learning tool for personal and community development and self-sufficiency, as a foundation for life skills ranging from basic communication to the ability to solve complex scientific and social problems" (Bhola, 1995, p. 7).

Internationally, the Organization for Economic Co-operation and Development (OECD), along with UNESCO, national societies in particular and world society at large focus attention on functional literacy. Thus, 1990 was declared globally as the *International Literacy Year* (UN, 1992), and during its fifty-sixth session, the UN General Assembly proclaimed the period 2003 to 2012 as *the Literacy Decade* "with the objective of achieving locally sustainable literate environments by extending literacy" to hundred millions of illiterate adults and children, and to draw the attention of the world community to this essential problem (UN, 2003). In addition, the majority of countries (97 countries) have certain laws, legal acts, state and public measures and initiatives to support the FL level of the adult population and youth (UNESCO, 2013, p. 42).

According to the statistics of current literacy rate, 85% of the adult population in the world is literate, and therefore worldwide about 781 million people are illiterate as the "UNESCO Education for All Monitoring Report, 2013–14" states (UNESCO, 2014). Even in Europe nowadays, the number of functional illiterates was estimated to be about 80 million; their proportion is lowest in Sweden with 8% and highest in Portugal with 40% (Vágvölgyi et al., 2016). The research conducted recently in Germany has revealed that from a population of over 80 million, about 7.5 million adults between the ages of 18 and 64 are functionally illiterate and can barely read and write despite on available for the affected help (*Illiteracy...*, 2015). These and many other facts confirm that functional literacy is pivotal for both individual and societal development in a rapidly changing world.

The concept of functional literacy

The essence of functional literacy concept has been changing through the times due to complicated challenges the mankind faced. So, we can consider FL in educational, social or political meanings, and there are numerous definitions of functional literacy and illiteracy.

Currently, the definition of functional literacy found by W.S. Gray describes those approaches to this phenomenon that focus the acquisition of proper verbal, cognitive, and computational skills to accomplish practical functions in culturally specific environment (Gray, 1956). FL is also labeled *survival* or *reductionist literacy* considering a minimal level of competency and the readiness of workers for jobs; FL is defined as "a way to help people negotiate successfully in their societies" (Encyclopedia.com, n.d.).

Modern researchers (Fuchs-Brüninghoff et al., 1986; Vershlovskiy, 2008; Gershunskii, 1990) define functional literacy as a social and economic phenomenon. They connect the level of its development with the level of well-being population and the state as a whole. Thus, the literacy in the 21st century is not only the set of basic skills of children acquired at school, but the set of skills, knowledge and strategies of personal development throughout the whole life in different contexts (political, economic, cultural, social etc.) in cooperation with other community members (Halus & Shaposhnikova, 2006).

Unfortunately, the existence of functional literacy becomes more evident when we face its absence. Functional illiteracy is considered one of the risk factors for modern civilization, which entails great losses and damages for our society. As defined by UNESCO, this term can be applied to any person who has substantially lost reading and writing skills and is not capable of perceiving a short and simple text that concerns everyday life. The consequence of such condition is the inability to perform elementary professional, public and life duties, professional or social functions, despite the education received (UNESCO, 2019).

Summarizing the analysis of various sources, functional literacy is considered as: 1) the ability to use universal methods of activity in order to solve problems of social adaptation based on the application of rules and norms regarding a specific situation; 2) the level of education, which characterizes the ability of a specialist to solve standard life and professional tasks in various spheres of activity on the basis of applied knowledge; 3) a person's ability to enter into relations with the external environment and quickly adapt and function in it.

The modern scientists stress that we need to make distinction between what could be called "ordinary" or "elementary" literacy and "functional literacy" (Bhola, 1995). It is important to distinguish *elementary or basic literacy* as the ability of an individual to read, understand what is read, compose simple short texts and perform the simplest arithmetic operations (reading-writing-calculating) and functional literacy as a certain level of knowledge, skills and abilities that ensures the normal functioning of an individual in the system of social relations, that is the minimum necessary for the implementation of vital activities of an individual in specific cultural environment (Yermolenko, 2002). Unlike literacy



as a stable personality trait, FL is a situational characteristic of a person and manifests itself in a specific life situation, especially when the situation or lifestyle changes.

Consequently, functional literacy as an integral part of today's society is a diversified phenomenon that is much wider and deeper than just literacy: FL of an adult is the ability to participate completely in the activities of his/her community, adapt to the economic and social changes using for these purposes contemporary knowledge, skills and technologies.

The constituent elements of functional literacy

In an extended sense functional literacy means having appropriate knowledge in any field. Coming from that, various types of FL are distinguished.

As Shaw et al. (2017) states, the sources represent a variety of fields in which researchers have interest in functional literacy, including: literacy/adult literacy/adult basic education, health literacy, workplace and family literacy, assessment, and literacy of theory and policy; these groups are not mutually exclusive, however. According to N. Dimitrova (2015), FL is presented as complex of types as: technological, economical, civil-legal literacy, political and social-communicative literacy, general-cultural, behavioral and methodological literacy, etc. Meanwhile, V. Onushkin and Ye. Ogaryov (2005) highlight four components of FL that provide success of human activities, including professional one: 1) knowledge of general theoretical, special and applied nature; 2) substantive understanding the essence of affairs and realities involved in the activity; 3) the ability to choose means adequate to the goal and to act accordingly; 4) quick action skills.

In the research of G. Bugaievska (2012), the following forms of functional literacy are singled out: general, computer literacy, foreign language proficiency, information and communicative literacy, household literacy, literacy of behaviour in emergent situations, socio-political literacy, etc. At the same time, in the study of E. Voronovych (2019), functional literacy is defined as "literacy for all", which involves a combination of: legal and general professional literacy, environmental literacy, civic literacy (ability to assess political and economic situation and make appropriate decisions).

Thus, today the meaning of the functional literacy concept extends to acquiring a complex of various knowledge and skills that allow a person to consciously participate in social processes; and the higher level of society development, the higher requirement is for the FL level of population.

Principles of pedagogical approach to functional literacy training

Functional literacy training is distinguished from traditional literacy training in that it ceases to be an isolated, separate operation, but treats the illiterate in a group context in relation to a given environment, and with a view to development (Bellahsène, 1993).

The main specific of FL programs is that they are connected with both collective and individual needs, and are differentiated according to the environment and adjusted to certain economic and social aims. In FL programs, instructions in reading and writing and the training component (technical, occupational, scientific, socio-economic, civic, etc.) are integrated activities. FL compared to traditional literacy uses a more *intensive approach* in order to ultimately acquire vocational and usable skills and knowledge. If traditional literacy programs are standardized and a centralized, FL programs are *variable and flexible*, and take into account the immediate objectives and specific situations.

Moreover, the pedagogics of FL training has features of a *socio-pedagogy* in constant relation to the milieu, it is *situational pedagogics*. It considers a person as an individual who: a) belongs to a certain social group with collective way of thinking, feeling, acting; b) has personal history, the status and functions in their occupational and family milieu; c) has problems for resolving and some needs to satisfy (UNESCO, 1970, p. 92). So, a FL program should take into account the sociological and psycho-sociological sides of the socio-economic environment.

Coming from the said, the basic *pedagogical principles of FL training* have been determined by educators as follows. Principle of convergence means that every problem should be studied from all its sides with the knowledge needed to understand it. Further we should resolve the identified by analysis the pedagogical problems. Principle of integration is integration of curricula with the activities of the milieu to train individuals' ability to fulfill their economic and social responsibilities. The principle of globality means that the individual acquires theoretical and practical knowledge and expands his mental skills and ability to communicate to take an active part in development. The principle of diversification is a differentiation of progressions and content of FL work from the very fact of the extreme variability of situations and problems. The principle of participation: since the message is modified by the feedback effects, communication presents an exchange in a context of active participation by the involved individuals (Bellahsène, 1993). The principles of andragogy is one of basic for FL learning, that means to apply an individual approach to every adult with consideration and development of his motivation to knowledge acquiring (Mukan & Fuchyla, 2016).

Taking into account the purposes, specifics and needs of the FL work, the development of teaching materials is of great essence and should correspond to some requirements. The common rules for elaborating FL teaching materials are distinguished as the global approach and the sequence-based approach. The other the principle of the FL training is adaptation of the material to the factors conditioning the work: to the teaching method applied; to the instructor's occupational profile; to the intellectual profile of adult illiterates (Bellahsène, 1993). The material should not only provide the instructor with a didactic tools and information, but with a pedagogic approach, and facilitate the understanding and pursuit of the pedagogical method. It should correspond to the socio-occupational background of the instructors. The solution of the problem of adaptation to the intellectual profile of the adult illiterates is provided by the utilization of familiar notions, to which the teacher links the new notions.



Conclusions

Thus, the analysis of theoretical and practical material allows summarizing the following. The need for a dynamic response of educational system to rapidly changing socio-economic and industrial-technological conditions determines global attention to functional literacy that plays a crucial role in the modern society, particularly in the context of adult education. The concept of FL has evolved over time, encompassing not only elementary reading and writing skills but also a broader set of knowledge and abilities that enable for individuals active participation and functioning in social, economic, political and other areas, continuous adaptation to changing circumstances. Since FL is a social and economic phenomenon, its level is connected with the level of well-being of the population and the state as a whole; the recognition of FL as a fundamental approach for development of democratic societies promotes individual development, economic growth, and national advancement. That is why, both national and international organizations, such as UNESCO and OECD, steadily make efforts to spread and maintain functional literacy assessments and training programs.

The research indicates that functional literacy is a complex of various knowledge and skills that allow a person to participate consciously in social processes. Therefore, the constituent elements of FL encompass general and professional literacy, computer and information literacy, technological, economic, political, communicative, household and cultural literacy, and many others.

Also it may be concluded that the basic characteristic of functional literacy training programs is that they are aimed both to collective and individual needs, and are differentiated according to the environment and adjusted to specific economic and social goals. The basic pedagogical principles of FL training, the development of teaching materials, content, and techniques for this work should be variable and flexible, use the intensive and andragogical approaches.

REFERENCES

Bellahsène, C. (1973). Practical guide to functional literacy: A method of training for development. UNESCO.

Bhola, H.S. (1995). Functional literacy, workplace literacy and technical and vocational education: Interfaces and policy perspectives. UNESCO, Section for Technical and Vocational Education.

Bugaievska, H.V. (2012). Functional literacy of university students as a scientific and pedagogical problem. Visnyk of LNU named after T. Shevchenko, 22(257), 73–79.

Dimitrova, N. (2015). Research of functional literacy as a new concept in the scientific knowledge. https://www.semanticscholar.org/paper/Research-of-Functional-Literacy-as-a-New-Concept-in-Dimitrova/

Encyclopedia.com. (n.d.) Functional literacy. In *Encyclopedia.com*. Retrieved June 20, 2023 from https://www.encyclopedia.com/humanities/encyclopedias-almanacs-transcripts-and-maps/functional-literacy

- Fuchs-Brüninghoff, E., Kreft, W., & Kropp, U. (1986). Functional illiteracy and literacy provision in developed countries: The case of the Federal Republic of Germany. UNESCO Institute for Education. https://unesdoc.unesco.org/ark:/48223/pf0000079048
- Gershunskii, B. (1990). Literacy for the XXI century. *Pedagogy*, 4, 58-64.
- Gray, W.S. (1956). The teaching of reading and writing. Scott, Foresman and Company.
- Halus, O., & Shaposhnikova, L. (2006). *Comparative pedagogy: A handbook*. Vyshcha shkola.
- *Illiteracy worldwide*. (2015). Alumniportal Deutschland. https://www.alumniportal-deutschland.org/en/sustainability/social-affairs/article/infographic-illiteracy-worldwide.html
- Mukan, N., & Fuchyla, O. (2016). Functional literacy learning in the system of adult education in Belgium. *Advanced Education*, 6, 34–39.
- Onushkin, V., & Ogaryov, Ye. (2005). *Obrazovanie vzroslyh: Mezhdistsiplinarnyi slovar terminov* [Adult education: Inter-disciplinary dictionary of terms]. SPb, VIPKRO.
- Shaw, D., Perry, K.H., Ivanyuk, L., & Tham, S. (2017). Who researches functional literacy? Community Literacy Journal, 11(2), 43–64.
- UN. (1992). International Literacy Year: Resolution / adopted by the General Assembly. In UN General Assembly (46th sess.: 1991–1992). https://digitallibrary.un.org/record/136108
- UNESCO. (1970). Functional literacy as a factor in development. UNESCO.
- UNESCO. (1979). Records of the General Conference, 20th session, Paris, 24 October to 28 November 1978, v. 1: Resolutions. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000114032
- UNESCO. (2013). The second global report on adult learning and education. Rethinking literacy. UNESCO Institute for Lifelong Learning. https://unesdoc.unesco.org/ark:/48223/pf0000222407
- UNESCO (2014). *Teaching and learning: Achieving quality for all.* UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000225660
- UNESCO. (2019). 4th global report on adult learning and education: leave no one behind: participation, equity and inclusion. UNESCO Institute for Lifelong Learning. https://unesdoc.unesco.org/ark:/48223/pf0000372274
- UN. (2003, February 13). *United Nations Literacy Decade (2003–2012) launched at New York headquarters*. United Nations. https://press.un.org/en/2003/obv322.doc.htm
- Vágvölgyi, R., Coldea, A., Dresler, T., Schrader, J., & Nuerk, H.-C. (2016). A review about functional illiteracy: Definition, cognitive, linguistic, and numerical aspects. *Frontiers in Psychology*, 7, 1617. https://doi.org/10.3389/fpsyg.2016.01617
- Vershlovskiy, S.G. (2008). *Nepreryvnoe obrazovanie (historiko-teoreticheskii analiz fenomena.* [Continuing education (historical and theoretical analysis of the phenomenon)]. Academy of Postgraduate Pedagogical Education. https://search.rsl.ru/ru/record/01004337905
- Voronovych, E.-V. (2019). Functional literacy is one of the ways of personality socialization. *Journal of Humanitarian Sciences*, *5*(1), 18–45.
- Yermolenko, V.A. (2002) Functional literacy in the modern context. ITOP RAO.

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