

Methodology of the environmental approach in higher education

Maria Vaselivna Bratko
Universitz College "Boris Hrinchenko" Kiev, Ukraine
E-mail: m.bratko@kubg.edu.ua

Received 14.07.2015; Accepted 19.09. 2015

Abstract

This article dealing with the theoretical background of the environmental approach in higher education is grounded on the idea of the methodological approach as the conceptual basis of educational activity that defines its strategy and tactics, regulates its tools, resources, and has a two-tier structure that includes methodological and technological levels. The analysis of the basic concepts of the approach — environment, learning environment, educational environment of higher education — is done. The structure and functions of the educational environment of higher education are found. It is concluded that the environmental approach in higher education is a system of controlling subject's actions within the educational environment of a higher educational institution aimed at acquiring characteristics of such an environment that would allow implementing the polystructural educational function successfully. The author considers the educational environment not only the condition but also the factor of formation and development of a future specialist's competence.

Keywords: *approach, methodology, educational environment, educational environment of higher educational institutions, environmental approach, environmental approach in higher education*

1. Introduction

Research of the educational environment phenomenon, analysis of the theoretical background of the environmental approach in higher education arise from pedagogy's present commitment to multidimensional and comprehensive evaluation of personal development factors in educational process. The environmental approach in education does not replace common methodological approaches – systematic, activity-related, person-centered, culturological, anthropological, ethical and pedagogical, competency-based – but completes and elaborates them.

2. Correlation between the environmental and other methodological approaches

Every named approach appeals to some extent to the educational environment as the personal development determiner, because a learner is necessarily surrounded by a certain educational environment, deliberately or involuntarily, consciously or unwittingly. The environmental approach allows integrating various methodological approaches, grants comprehensive consideration of the

educational process. The correlation between the environmental and other methodological approaches is graphically represented in the Figure 1.

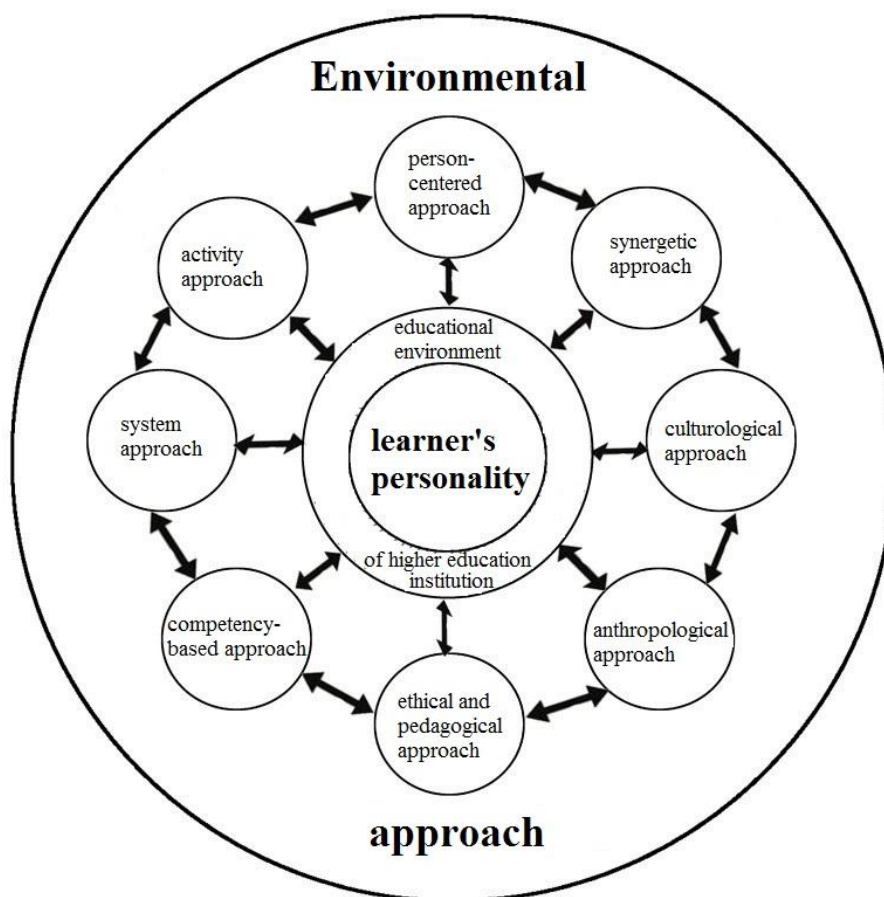


Figure 1 - The correlation between the environmental and other methodological approaches in education

In many contemporary academic papers on pedagogy, the environmental approach is presented as currently important, fresh, alternative to the authoritarian approach, the one that provides a «gentle», pedagogical influence upon a developing personality throughout the learning process. However, as A. Khutorskoy quite reasonably observes, practically every pedagogical system has its own model of educational environment. (A. Khutorskoy, 2014).

Along with that, closer attention to the environmental approach is indeed one of the most notable modern trends in all the fields of scientific knowledge, including socio-humanistic. According to V. Lepskyy, it is related to the postnonclassical stage of scientific advancement, when the relation between a researcher and a study subject is generally described with formulas «subject – subject»,

«subject – semisubjective environment», and control mechanisms suggest a wide range of interaction styles within a system – control, governance, mediation, stimulation, encouragement, support, creating conditions, providing possibilities etc. (V. Lepskyy, 2011).

Consequently, the search for effective ways to improve higher education quality prompts examination of the environmental approach as a basis for modernization of the social institution of education and consideration of the educational environment as a special potential quality resource.

The analysis of the conceptual framework of the environmental approach in higher education demands, above all, updating and fixation of meaning of the *approach* as a pedagogical category. General conception of the «approach» lexical item is interpreted as «an aggregate of methods, patterns of considering something, influencing someone or something, treating someone or something» (Unabridged Explanatory Dictionary of the Modern Ukrainian Language, 2005). Approach is applied in pedagogical methodology to solving theoretical and practical pedagogical problems, considered as some underlying principle, initial position or conviction, study subject's research trend, an attribute or set of attributes of operation quality. According to I. Drach, «approach» is a certain initial principle, initial position, main thesis or conviction, that is taken as a basis, a study subject's (target's) research trend of exploratory activity (I. Drach, 2013). L. Khoruzha considers an approach a methodological basis of any process, that defines the set of research methods and procedures of a subject, its structural, functional features, properties, interaction with the world around (L. Khoruzha, 2013).

That means, an approach is a guide and a tool for theoretical search and practical activity in pedagogy, which is defined by a set of values, goals, principles, methods. An approach as a certain theory has a three-part structure: basis – core – effects. It is based upon a certain concept (basis) and key terms, uses its own terminological glossary, functions according to some patterns and principle (core), makes demands to methods and procedure (effects). «Approach» category researchers (I. Blauberg, Ye. Yudin, 1973, T. Davydenko, 2001) point out its essential features such as connection of certain theoretical principles and theses and their corresponding activity methods. *Two tiers* are distinguished in the approach structure: conceptual-theoretical (basic, initial conceptual theses, ideas and principles, epistemological background of activity executed from perspectives and within the boundaries of an approach) and procedural and activity-related (methods and operational forms that are appropriate, suitable for the concept-oriented matter).

Therefore, the theoretical background of this research of the environmental approach in higher education is the vision of an approach as the conceptual basis of educational activity, that defines its tactics and strategy, specifies tools and resources and has a two-tier structure which includes: the first tier – *methodological* (initial theoretical principles, theses and definitions); the second tier – *technological* (goals, means, methods, resources, control mechanisms appropriate for the theoretical principles and theses). This two tiers are interrelated, interdependent, appropriate for one another.

Basic concepts of the environmental approach in higher education are concepts of *environment*, *educational environment*, *educational environment of higher educational institutions*.

A Dictionary of the Ukrainian Language gives these explanations of the «environment» concept: 1) matter, objects that fill some space and have certain properties; field; 2) set of natural conditions in which some organism's vital activities are executed; 3) social and living conditions in which a human life goes on; circumstance; 4) set of people, connected by common living conditions, activities, interests (A Dictionary of the Modern Ukrainian Language, 1990). Broadly defined, environment is understood as setting that consists of a set of natural, material, social factors that influence a person directly or indirectly. An environment is what lies between some objects, is a «mediator» between them.

V. Sukhomlynskyy claims that the environment is «also a set of things that surround a learner, actions of elders, examples given by teachers personally, general moral tone of school group's life (how the idea of care about human beings is exercised), tenderness, kindness»; points out the fact that «the environment is not something unchangeable, created once and for all», «the environment should be created and enriched everyday» (V. Sukhomlynskyy, 1988).

Formulation of author's understanding of the educational environment phenomenon at higher education institutions is based upon the results of analysis of academic views on the phenomenon in question, presented in papers of contemporary national and foreign psychologists and pedagogues, which are: V. Avdeyev, 1997, A. Artyukhina, 2006, I. Bayeva, 2009, H. Belyayev, 2000, S. Bratchenko, 1999, Ye. Vasilyeva, 2012, N. Hontarovska, 2012, O. Horchakova, 2011, S. Deryabo, 1997, V. Drofa, 2003, T. Hushchyna, 2011, E. Zeer, 2008, A. Katashov, 2001, V. Kozyryev, 2004, O. Kurakin, 1985, K. Krechetnikov, 2002, N. Krylova, M. Knyazeva, 2000, T. Loshakova, 2001, Yu. Manuylov, 1997, V. Masterova, 2003, T. Meng, 2001, L. Novikova, 1985, V. Novikov, 2012, V. Orlov, V. Panov, 2004, 2007, H. Polyakova, 2012, K. Prykhodchenko, 2010, L. Redko, 1996, V. Rubtsov, 1997, N. Selivanova, 2001, V. Slobodchikov, 2000, 2010, S. Tarasov, 2011, L. Shkerina, 2010, V. Yasvin, 2001.

Most of scientists understand the educational environment as a multiple tier system of *conditions/circumstances/factors/possibilities* that provides optimal parameters of educational activity of a certain educational body in all its aspects – target-related, matter-related, procedural, effective, and resource-related.

In spite of numerous academic papers containing the basic concepts of «environment», «educational environment», no detailed analysis of the environmental approach is presented in full.

In this context, scientific progress of Yu. Manuylov is to be mentioned favorably, the author of the thesis research «The environmental approach in education» («Средовой подход в воспитании», 1997), which is related to the active implementation of the environmental approach in pedagogical theory and practice. The scientist brings forward the academic problem of basic concepts elaboration for the technology of indirect (through the environment) child's formation and development control, which would base on comprehensive experience of using environmental options for reaching educational goals, offers the scientific background for the conceptually new environmental approach, because previously environment was studied within the framework of traditional approaches – activity-related, person-centered, systematic. Yu. Manuylov has developed definitions, semantics (theoretical basis) and pragmatics (main aspects of functional structures modeling and realisation) of the approach. The educational environment is understood by the author as a spatially confined and event-limited aggregate of personal influences and formative conditions, also possibilities for its development, that emerge during the contact of a person with his or her social, spatial and subject circumstance. According to Yu. Manuylov, procedurally the environmental approach is a system of controlling subject's actions within an environment that provides diagnostics, designing and producing of the educational outcome (Yu. Manuylov, 1997).

V. Serikov develops the academic problem of the environmental approach in higher education quite thoroughly, more specifically its realization in the pedagogue training process. The scientist reckons that pedagogues' consideration of environment in the educational process is primarily related to understanding that education does not take place in classrooms only during the studies or some events. Factors of environment, communication, social and natural events have their effect alongside the regulated personal influence. The scientist considers environment as a natural-sociocultural phenomenon that actively interacts with a person, performs functions of symbolizing, presenting the social standards and values, stimulation (reinforcement and constraint), restriction and assistance, communication stressfulness and comfort. According to him, an environment is always dialectic, opposites act within it, and nearly always options are present (V. Serikov, 2012).

3. Results of the academic sources

Results of the academic sources survey made the theoretical background for formulating author's view on the phenomenon in question (Eşi, 2014). The trend present in all the researches – view on the educational environment as a systematic phenomenon (formation) that performs certain functions, a condition, a factor, a field of possibilities for educational process subjects – is considered. Progress and results of the research considering essential characteristics of the educational environment are presented in academic papers (Soroka M., 2012, Bratko (Soroka) M., 2012, Bratko M., 2014), therefore only basic ideas about realization of the environmental approach at higher education institutions are introduced in this article.

We believe that an educational environment of a higher education institution is a multi-subject and multidisciplinary systematic formation that has objective possibilities of intentional influence upon the professional and personal development of a future specialist, ensuring his or her readiness for

professional activities and/or continuing education, successful social roles performance and self-fulfillment in the living process. It is by nature an aggregate of *conditions-possibilities and resources* (material, financial, personal, technological, organizational, reputational) for personal education intentionally formed in a body that performs educational functions of providing higher vocational education, guarantees possibilities for cultural and personal development of educational process subjects.

Characteristics of an educational environment of a higher education institution as a systematic formation are:

- *integrity* (every element contributes to realization of system's target functions),
- *unity* (manifested in connections and mutual influences between system elements),
- *emergence* (appearance of system properties not typical of single elements),
- *organized nature* (presence of a certain structure and corresponding functions),
- *structuredness* (order, hierarchy of elements),
- *durability* (ability to preserve certain properties or to renew them in case of loss),
- *evolvability and sustainability*.

An educational environment of a higher education institution is the determiner of development, personal becoming during the time of acquiring a professional education at a higher education institution. In an educational environment of a higher education institution the essence of «an educational personal life» is concentrated, factors, causes of educational processes and phenomena. A higher education acquirer constantly interacts with an educational environment of a higher education institution: the educational environment influences the person; the person changes the environment with his or her actions. An educational environment is to be considered proper only if it is capable of providing possibilities for satisfaction of educational needs, personal development, and self-development to all the educational process subjects. When an educational process is organized on the ground of the environmental approach, an educational subject's need for free choice, personal freedom, chance for approving himself or herself in fields of productive or creative activity is fulfilled at most. An educational environment becomes then not only a condition but also a factor and a method of future specialist's personal development. Hence, higher education quality correlates with quality of an educational environment of a higher education institution, in which all the possible educational processes – learning, moral becoming, self-fulfillment, enculturation, socialization – are to be intensified. The depth of personal acquisition of an educational environment is determined by the personal attitude towards the environment and readiness to use the resources and possibilities provided. A person acknowledges some influences as a standard for values and norms of his or her conscience, behavior, activity and rejects the others that do not conform to his or her life principles. A person is ready to use some possibilities of an educational environment, the others he or she cannot use due to the lack of certain knowledge, necessary skills, and competency. As a result, an environment does not «produce» identical people. Most of researchers reckon that a personality reflects not an environment itself but an experience of interacting with it, some events and corresponding emotions. An educational environment of a higher education institution is an ideal one when it guarantees every person an access to educational

resources in convenient way and time, provides a person with possibility to choose an individual path, style and time of education, supports the efforts of those who wish to share their acquired knowledge, gives a person an opportunity to present his or her educational results.

Scientists have formed no consolidated opinion on constituents of an educational environment of a higher education institution yet. In our view, such elements may be singled out in the structure of an educational environment of a higher education institution:

- *personal* (educational process subjects, connections and interactions between them that find expression in activity, communication and behavior);

- *axiological-semantic* (mission, vision, strategy, values, traditions, ceremonies, rituals, symbols, corporate culture, stories of socially approved life achievements of alumni);

- *informational-conceptual* (main and supporting educational programs; extracurricular cultural and social projects, statutory documents which regulate educational activity and interaction between educational process subjects);

- *organizational and activity-related* (forms, methods, technologies, styles of interaction and behavior of educational process subjects, ways of communication, including social networks, control structures and mechanisms, including student self-governance);

- *spatial and object-related* (material and technological infrastructure, classrooms, computer pool, equipment for internal networking and access to Internet, library resources, including digital, conveniences, interior design and equipment).

Structure of an educational environment of a higher education institution is closely related to its functions. The «educational» adjective shows that the issue is not just an environment for living activities but also an environment for acquiring education. Hence, its dominant function is providing higher education (*educational function*). This function is a multiple-aspect and polystructural one and it includes, in our opinion confirmed by empirical research, *educational-professional*, *educational-socializing*, *educational-cultural constituents*, which may be reckoned separate basic functions of an educational environment of a higher education institution, because the lion's share of its resources and time is spent for their fulfillment. It is necessary to consider that fulfillment of said functions is an interrelated and simultaneous process, while optimizing one function inevitably leads to changes in fulfillment of others.

Educational-professional function of higher education is directly related to fulfillment of the intended higher education's destination – assistance for a person in acquiring knowledge skills, competency, that allow him or her to successfully work within his or her specialty in the future. Theoretically, a college-educated human being is a self-reliant moral and spiritual person, which has internalized the thesaurus of culture and culture-creating skills and uses it actively in all the life dimensions (*educational-cultural function*). An educational environment of a higher education institution provides a person with unique possibilities for acquiring experience of overcoming difficulties, purposeful activities, success and loss situations, abandonment of stereotypes for new experience, controlling one's behavior and emotions in various situations, participating in dialogs and debates, forming own view on events and phenomena, adopting rules, style of work presented by the corporate culture of a higher education institution, sense of education necessity for the future life, mending communication channels and friendly relationships. In such a way, an educational environment bears one more *function* – *educational-socializing*.

This approach to determining the phenomenon of an educational environment of a higher education institution allows considering any condition or any resource of an educational environment as a «*factor of influence*» upon an educational process subject at a higher education institution. Hence, changing them intentionally we can have an indirect effect upon quality of all the educational process constituents, including its result – a graduated specialist.

In summary, we can claim that intentional examination of an educational environment, detecting possibilities for educational process subjects' development allows not only to assist the subjects in adapting to the educational environment conditions, but also to facilitate maximal fulfillment of educational goals by influencing it in some way for the purpose of achieving desirable attributes (quality characteristics). Conditions-possibilities of an educational environment have to become a resource for raising education quality, a source for development of various types of personal experience.

4. Conclusions

The environmental approach gives the controlling subject a methodology and a technology of using an educational environment of a higher education institution for professional and personal development and self-development of higher education acquirers. The main distinction of the environmental approach is the necessity to provide quality not of a pedagogical process directly, but of an educational environment, which, in its turn, becomes a guarantee, a pledge of quality of the educational process and its results. The environmental approach changes the emphasis of pedagogical activity: the direct effect of a pedagogue upon a person is replaced by the activity aimed at creating and developing an environment that has to satisfy educational needs of an education acquirer optimally.

References

1. Blauberg, I.V. (1973). Formation and essence of a systematic approach. Moscow: Nauka (in Russian).
2. Bratko, M.V. (2015). Structure of the educational environment of higher education institutions. Scientific Notes. Kirovograd: RIO KSPU them. Vynnychenko (in Ukrainian).
3. Bratko (Soroka), M.V. (2012) Essential concept of "educational environment institutions ". Teacher Education: Theory and Practice: Coll. Science. pr. Kyiv. University of them. Boris Grinchenko, Institute of Problems of Education NAPS Ukraine. Kyiv, № 18: Psychology. Pedagogy. Kyiv. University of them. B.Grinchenko (in Ukraine).
4. Eşi Marius Costel. (2014), Didactic Options for the Environmental Education, in *Procedia Social and Behavioral Sciences*, 180, 2015, 1380-1385.
5. Great Dictionary of Modern Ukrainian (2005). Project Manager Movchan, P., Nimchuk, V., Klichak V. K .:Enlightenment (in Ukraine).
6. Davydenko,T.M. (2001). Capabilities and limitations of using a synergistic approach in educational research. Pedagogical science and its methodology in the context of modernity: Sat. scientific. Art. M. (in Russian).
7. Drach, I.I. (2013). Managing the formation of professional competence of High School graduate pedagogy: theoretical and methodological foundations: Monograph. K:Dorado-Druk (in Ukraine).
8. Manuilov, Y.S. (1997). Environmental approach in education [Text]: Dis. ... Dr. ped. Sciences: 13.00.01. M. (in Russian).
9. Cross-cutting issues of environmental approach to innovative development / ed. Lepsky,V.E. (2011). M.:Cogito Center (in Russian).
10. Serikov, V.V. Personal-developing educational environment as a resource teacher training. Discussion of problems of the theory of environmental approach as the methodology of indirect administration in education, social processes, the exchange of practical experience and training in teaching methods of logic sredovye approach. [Electronic resource]. Access: http://www.vspc34.ru/index.php?option=com_content&view=article&id=1276 (in Russian).
11. Dictionnaire Ukrainian Language. Vol. 9. [Electron resource]. Access mode: <http://sum.in.ua/s/seredovyshhe/> (in Ukraine).
12. Soroka, M. (2012). University College educational environment as an object of management. Continuous professional education: Theory and Practice. Scientific-methodical journal (in Ukraine).

13. Sukhomlinsky, V.O. (1988). Conversation with a young director. K: Rad.shk. (in Ukraine).
14. Khoruzhaya, L.L.(2013). Features of the implementation of ethical and pedagogical approach in vocational education. Pedagogika (in Polish).
15. Hutorskoy, A.V. (2014) Environmental approach in education – an alternative to the authoritarian [electronic resource].Chronicle existence of 24.02.2014 [personal site]. <http://khutorskoy.ru/be/2014/0224/index.htm> (in Russian).