

MSC 2020**International Scientific and Practical Conference «MAN. SOCIETY.
COMMUNICATION»****THE CATEGORY OF “CONTINUITY”: GENERAL AND SPECIAL
IN ITS STUDY AND UNDERSTANDING**

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Abstract

The article presents a study aimed at implementing the principle of continuity in the system of developing continuous education of the individual. The article substantiates that the complex, unified (cosmobiopsychosocial and cultural) nature of man itself requires a reasonable combination of the ideas of complementarity and continuity in solving the problems of the formation of “the man of the future.” This discussion gives the reader incomplete, but necessary information for the successful implementation of the original multifunctional programmed exercise for the study, multilevel understanding and diagnosis of assimilation of the category of "continuity". The main guideline in the disclosure of the category of "continuity", the authors use their generalized plans for cognition of knowledge of the essence of the subject (phenomenon). An original and multifunctional "Programmed exercise for the study, development and diagnosis of the concept of" continuity "in the development of the individual is presented. This exercise not only “teaching develops and educates,” but also, in the general case, allows you to evaluate the style of thinking, worldview, their intuitive and rational components, reflective skills, include assessment and self-esteem, i.e. to carry out control, adjustment and self-control of mastering the concept. The conclusions of this research are presented, the main guidelines and directions for further study and solution of the problem of continuity in the system of developing continuing education of the individual are shown.

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Keywords: Complementarity, continuity, professional and pedagogical thinking, reflection



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1. Introduction

Continuity is a complex multidimensional category. At the general philosophical level, it reflects manifestations of a peculiar inertness towards a noticeable and rapid change in the essential properties and states of objects. This is manifested in the preservation of the most progressive elements of the past during the transition to a new state of the studied subject or phenomenon. Man is a product of Nature and culture, which (as the second nature) is transmitted to him in society. Hence, in the light of the objective trend of fusion and a well-defined, corresponding continuity of the natural sciences and the humanities, they speak of a single integrative – cosmobiopsychosocial and cultural, human nature and taking into account the complementary harmony of the principles of nature-related and cultural-conformity in his education (Vernadsky, 2016).

2. Problem Statement

1. The nature-like, “natural” continuity (correspondence in the present between the past and the future, old and new) is an objective, inevitable (from the nature of things and events) continuity in the relationship of Man with Nature. It manifests itself, for example, in the rhythms of Nature, in particular, in space, in earthly rhythms, in the transmission in the living world of a genetic code (and skin colour, hair, eye features, for example) from generation to generation. Many social global rhythms (epidemics, geophysical disasters, wars) are their consequences or depend on them (Bakholskaya et al., 2019).

2. The sociocultural-like continuity (through the transfer from generation (through personality formation) to the generation of “to think as it should” – the thinking culture) is manifested in accordance with new and old (classical) theories, language, traditions, habits, most abilities, character, national professional (labour) competencies. As it is clear from the above, the unified integrative nature of man presupposes an interdependent asymmetric (complementary) harmony and universal, general continuity or correspondence to it of nature and culture, natural conformity and cultural conformity.

3. Research Questions

Biological (and physical) nature – this is the only natural, nature-like succession real basis on which a person is born and exists. The formation of man occurs through socialization, the transfer of experience (and culture) of mankind. On the basis of biological nature, he needs to acquire a social nature, or rather, a sociocultural one – it is not for nothing that they say that culture is the second nature of man, and his education is the transfer of culture to him in society, in society at different levels or types.

Only in society and from society does a person acquire his "second" social, socio-cultural nature. In society, a person learns human behaviour, guided not only by animal needs and instincts, but also by public opinion; in society, zoological instincts are curbed; in society, a person learns the language, thinking, customs and traditions developed in this society; here, a person perceives the experience of production and production relations accumulated by society. "...So all our dignity is locked in thought. Let us try to think as we should: this is the foundation of morality" (Pascal, 2001, p. 192).

No one will deny the attribution (inherent essence) of human social nature. But in the structure of human nature, the same attribution belongs to the complementarity of biological and spiritual nature in determining its essence. The predominance of natural over culture leads to rudeness, and culture over natural leads to the pedantry of a clerical official. Even prehistoric people at the stage of their mythological worldview were aware that the cause of this combination is something that is located in the person. This "something" they called the soul, in Greek "psyche". Plato made the greatest scientific discovery through purely philosophical reflection. He established that the human psyche (soul) consists of three parts: the mind, feelings and will. The entire spiritual world of a person is born precisely by his Mind, his Feelings, and his Will. Despite the innumerable diversity of the spiritual world, its inexhaustibility, there is really nothing else in it but the manifestations of intellectual, emotional and volitional elements.

Plato, being a great teacher who took into account the state and level of spiritual development of his contemporaries, described his discovery in the form of a myth. The soul, he wrote in his dialogues – is a chariot drawn by the Mind and the Senses, and driven by the Will. When the Mind, detached from earthly things, climbs to heights of heaven too much, the Will precipitate it, returning to reality; when feelings, heavy, lustfully, tend to sink too much into the earthly, the Will holds and raises them. The whole chariot (the soul, the whole life of man) moves in the direction that the Will points to it. The spiritual (moral and spiritual) nature of man, complementing the biological nature of man in the conditions of social life, contributes to the transformation of man, as a biological individual, into personality and individuality (a man is born as an individual, becomes a personality, and upholds his individuality).

There are many definitions of personality, with the identification of its signs and characteristics. Personality is a set of socially significant manifestations of the spiritual world of a person in inseparable connection with its biological nature in the process of social life (Gnevek et al., 2017). A person is a social being who is a public development figure and who makes decisions with knowledge (consciously) and is responsible for his actions and behaviour (Oleinik et al., 2019). Personality, as one of the key hypostases of a person, is manifested as a super sensible socially significant quality. The content of a person's personality is his spiritual world, the central place in which is occupied by his worldview and socio-pedagogical thinking (Dewey, 1997). Note that in modern biopsychology, the mind is defined as a set of abilities that allow us to understand things and facts.

4. Purpose of the Study

The spiritual world of a person is directly generated in the process of the activity of his psyche. And in the human psyche, as noted, there are three components: Reason, Will, and Feelings. Consequently, in the spiritual world of man there is nothing else but the elements of intellectual and emotional activity and the volitional impulses that unite them.

Z. Freud's triad is known for the psychoanalytic characterization of human behaviour: "I", "ideal I", "It", and, to a certain extent, the corresponding conceptual triad of mental states of the famous psychoanalyst E. Berne – "Parent", "Adult", "Child" (as cited in Bern, 2018). There are other well-known triads that model (and in different ways) reflect pictures of the psyche, relationships, interactions or thinking. They are no less significant and conceptual for science and for people of different styles of thinking and different worldviews: mind, body, feelings (Plutarch); spirit, body, soul; concepts, ideas,

emotions; “World of ideas”, “World of signs”, “World of things”; “Culture”, “Reason”, “Genes”; or “Reason”, “Man”, “Biosphere” (in modern co-evolutionary strategy); “God the Father”, “God the Holy Spirit”, “God the Son” (in Christianity and, in particular, in Russian Orthodoxy). And, finally, the triad of laws and corresponding principles of thinking and behaviour of a person (and society): culture conformity, complementarity, nature conformity corresponds to each of them, and, to some extent, generalizes them (in the picture of integrative-dialectic reflecting-pedagogical thinking). For them see exercise 4 (Granatov, 2011).

The programmed exercise in a minimized form (wording of the questions) is presented below, after the above brief generalizing justification of the problem under discussion. Realizing all educational functions, it itself contributes to the interpretation, study and diagnosis of the assimilation degree of the information presented in it at all four levels: general philosophical (questions 1-4), philosophical and educational (special – questions 5-8), at the individual, psychological and pedagogical-epistemological and methodological plan (9-12 questions) and on the damage of a particular – (13-17 questions). The seventeenth question relates to a general critical interpretation of the concept of “continuity”. Accordingly, students or teachers can perform this exercise not all at once, but in parts – first answer the questions of the first two levels (1-8 questions), and then after a while – the questions of 3-4 levels (9-17 questions) – depending on those didactic tasks that are planned by the teacher using it in vocational education.

5. Research Methods

The programmed exercise to study, develop and diagnose the concept of "continuity". Man is a product of Nature and culture, which (as a second nature) is transmitted to him in society, in society. Hence, in the light of an objective tendency to merge and a well-defined, corresponding continuity of natural Sciences and Humanities, we speak of a single integrative-cosmobiopsychosociocultural nature of a person and of taking into account the complementary harmony of the principles of nature conformity and culture conformity in his education (Mameteva et al., 2017).

As is clear from the foregoing, a single integrative nature of man implies an interdependent asymmetric (complementary) harmony and universal, general continuity or its correspondence to nature and culture, nature conformity and cultural conformity (Table 01).

Table 1. The programmed exercise to study, develop and diagnose the concept of "continuity"

Signs of the concept						tags of dialectical cognition	Questions of the programmed exercise on the formation of the concept of "continuity"
generalization	irreversibility	coagulation	phasing	system	reflexivity		
+	•	•	•	•	+	I. Concept basis	1. What is the total generic interpretation of continuity? 2. What kind of continuity or its manifestations most likely determines the synergy of matter, society and man? 3. Which of the following statements, in Your opinion, refers to both nature-like and culture-like continuity – their complementary relationship?
•	*	•	•	•	+		
+	•	•	•	•	+		

•	+	•	•	•	•	II. Concept core	4. Understanding of the concrete is possible through the awareness of its generic ties and unity with the general, special and separate. Which of the following interpretations of continuity is the most general and more informative?
*	*	•	•	+	+		5. What are the necessary and sufficient conditions for the successful implementation of sociocultural continuity in the modern system of national education?
*	*	•	•	+	+		6. A personality is a socially significant sustainable image of a person, showing his universal, national and individual qualities, signs or properties. What is the meaning and need for continuing education of an individual?
•	•	•	•	•	+		7. Which of the following types of continuity and their manifestations is historically the most stable and practically does not change over time?
+	•	*	+	•	•		8. What is the psychological and pedagogical readiness of a teacher to implement continuity in the development of cognitive abilities of students?
•	+	+	*	*	•		9. What mainly determines the system of leading motives and beliefs of the teacher's personality, which effectively implements continuity in the development of students' cognitive abilities?
+	•	*	+	+	•		10. Cognition is always aimed at comprehending the essence of a system of properties, attributes of studied objects in their natural organic connection. What can be the main basis and criterion for the development of cognitive abilities of a person?
•	•	+	+	*	•		11. What are the sources and driving forces of the continuous development of cognitive abilities of students?
•	*	•	+	+	*		12. In Your opinion, what specific parameters should be used to ensure continuity in the development of students' cognitive abilities at different levels of education?
+	*	•	•	•	+		III. Consequences
*	+	+	•	•	+	14. Distribute the following professional skills of the teacher in the aspect of the implementation of continuity in the development of cognitive abilities of students in the following four groups of skills: I. Gnostic (cognitive). II. Constructive and diagnostic. III. Organizational. IV. Communicative. V. Design.	
*	+	*	+	*	*	15. In what interpretation of the idea of complementarity, its real connection with the ideas of conservation and continuity is more clearly seen?	
*	+	*	+	*	*	IV. General interpretation	
*	*	*	*	*	*		17. The idea of continuity, having gone from a particular scientific principle (correspondence) to a general scientific criterion for the truth of new scientific theories, has transformed in science the form of a mature general scientific concept (category). This concept has all its features – necessary attributes: I. Generalization. II. Irreversibility. III. Coagulation. IV. Phasing. V. System. VI. Reflexivity. Which of the signs of the concept dominate in each question of the exercise?

6. Findings

All of the above and the presented multi-functional programmed exercise illustrate one of the current promising areas of complementary combination of professional education and self-education (distance, for example) in the study of complex and integrative concepts and their systems. The long-term period shows that the systematic use of such exercises in professional education is very effective.

It is necessary to take into account the following methodological and epistemological conclusions and guidelines in the process of improving the preparation of socially-oriented and professionally-pedagogical personnel for the implementation of continuity in the development of dialectical thinking and cognitive abilities of students (Lomakina et al., 2019).

The symbols (*) indicate the dominant signs, and the symbols (•) – those that manifest themselves in one way or another, “work” at the stages of understanding the essence of a concept (Table 02).

Table 2. The essence of this feature of the concept

Necessary signs the concepts	The essence of this feature of the concept	Stages of formation of integrative concepts and skills			
		I. Concept basis	II. Concept core	III. Consequences	IV. General interpretation
Generalization	It is realized not only at the level of generalization of ideas, but also with the expansion of the general scientific volume of integrative concepts.	**	•	•	*
Irreversibility	It is associated not so much with emotional memory as with the systematization of content-semantic interdisciplinary connections.		*	*	•
Coagulation	It is determined not so much by the brevity of definitions as by the clarity of their relation to the system of ideas of the natural -scientific picture of the world.	•	*	*	•
System	It has an objective connection not only with the stage of development of concepts , but also with the possibility of identifying a system of natural science ideas.	•	•	*	*
Phasing	It is connected with the possibility of establishing not only informational, but also chronological interdisciplinary connections.		•	*	*
Reflexivity	It appears in the form of both direct and delayed reflection.	•	•	*	*

7. Conclusion

An important aspect is the complementarity of the rational and the irrational in the process of developing thinking and cognitive abilities of students, taking into account their age characteristics and, in particular, the dominance in the work of intuitively-shaped and emotional components of thinking (Sysoyev et al., 2015). There must be an understanding of the full process of cognition from the point of view of continuously successive self-movement, self-development. This requires the attention of the social educator

and subject teacher not only to the content of the material, but also to the process of developing concepts, methods and forms of organizing their cognitive activities (Babunova et al., 2017). In this case, it is necessary to take into account the complementary logical interconnections of the four stages of the development of concepts (foundation, core, consequences, general critical interpretation) with four levels of their assimilation (general, special, separate and concrete).

The concept integrates the process and result of cognition of the essence of objects, processes and phenomena, includes reflexive processes of thinking, ensuring their generality, irreversibility, phasing, convolution, system and reflexivity (Pavlova et al., 2019). The concept concentrates the essence and meaning of information and can act as a unit, a "living cell" of the process of developing cognitive abilities at all age levels of education.

Methods of concepts' development should take into account the unity of the image, words, actions in the student's activities using symbolic means as a link between the figurative and verbal components of thinking (Orinina et al., 2019). This should involve various types and forms of continuity and complementary activities based on the leading activities and creativity of the student.

The model of implementation of continuity in the development of students' cognitive abilities is based on a triad of principles: nature-likeness, complementarity and culture-likeness.

The formation and improvement of professional social and pedagogical thinking of teachers is a key condition for the implementation of continuity in the development of students' cognitive abilities. It is aimed at their developing education and self-knowledge in the study of the ideological and conceptual content of academic disciplines (Makhmutova et al., 2017).

The richest is the most concrete and the most subjective. It is thanks to continuity that the new – in the particular, concrete and subjective – combines and complements in its essence the generic and its distinctive properties and characteristics. This unity of the general, special, separate and concrete defines the system of essential qualities of objects and subjects. It forms its essence, reflected in the concepts of them. Truly, "everything flows, everything changes" and ... repeats itself (in a rhythmic succession of updates).

References

- Babunova, E. S., Gradusova, L. V., Pustovoytova, O. V., & Shepilova, N. A. (2017). Psychological and pedagogical support in positive socialization of preschoolaged children. *Espacios*, 38(55), 11-16. <http://www.revistaespacios.com/a17v38n55/a17v38n55p11>
- Bakholskaya, N. A., Velikanova, S. S., Baklykova, T. Yu., Mitsan, E. L., Kozhushkova, N. V., Kondrashova, E. N., & Chernykh, O. P. (2019). The impact of interactive model for university student teaching on their professional competence development. *Revista Inclusiones*, 6(2), 179-184. <https://elibrary.ru/item.asp?id=36700835>
- Bern, E. (2018). *Games People Play*. Penguin.
- Dewey, J. (1997). *Psihologiya i pedagogika myshleniya* [Psychology and Pedagogy of Thinking]. Sovershenstvo.
- Gnevek, O. V., Savva, L. I., Saigushev, N. Ya., Vedeneeva, O. A., & Shepilova, N. A. (2017). The role of the reflexive orientation of training in the formation of a positive attitude toward learning of trade by future marketers. *Man in India*, 97(21), 195-217.
- Granatov, G. G. (2011). *Myshlenie i ponyatie (konceptciya dopolnitel'nosti)* [Thinking and concept (concept of complementarity)]. Flinta. Nauka.

- Lomakina, E. A., Dubskikh, A. I., Kisel, O. V., Butova, A. V., & Potrikeeveva, E. S. (2019). Differentiated approach as a factor on development of students' professional communicative competence. *Amazonia investiga*, 8(19), 287-297. <https://elibrary.ru/item.asp?id=37617143>
- Makhmutova, M. V., Davletkireeva L. Z., Laktionova, Yu. S., Belousova I. D., Savinova Yu. A., & Samarokova I. V. (2017). Training of it specialists within the university information-educational environment *International Journal of Advanced Biotechnology and Research*, 8(2), 753-761.
- Mameteva, O. S., Rashchikulina, E. N., Potrikeeveva, O. L., Bezenkova, T. A., & Buriilkina, S. A. (2017). Methods of developmental control in formation of students' socio-pedagogical thinking. *Man in India*, 97(5), 105-127.
- Oleinik, E. V., Ispulova, S. N., & Bezenkova, T. A. (2019). Social'noe proektirovanie v kul'turno-dosugovoj deyatel'nosti podrostkov v uchrezhdenii dopolnitel'nogo obrazovaniya [Social design in the cultural and leisure activities of teenagers in the institution of additional education. *Perspektivy nauki i obrazovaniya* [Perspectives of science and education], 4(40), 215-224. <https://doi.org/10.32744/pse.2019.4.18>
- Orinina, L. V., Kashuba, I. V., & Samarokova, I. V. (2019). Formirovanie psihologo-pedagogicheskoy kompetentnosti studentov vuza sredstvami treningovoy raboty [Formation of psychological and pedagogical competence of University students by means of training work]. *Perspektivy nauki I obrazovaniya* [Perspectives of science and education], 1(37), 316-326. <https://doi.org/10.32744/pse.2019.1.23>
- Pascal, B. (2001). *Mysli* [Thoughts]. <https://azbyka.ru/otechnik/konfessii/mysli-paskal/>
- Pavlova, L. V., Pulekha, I. R., Vtorushina, Yu. L., Rakhimova, N. M., & Akasheva, T. V. (2019). Enhancing reflection activity as a condition for the effective development of students' humanitarian culture in the process of learning a foreign language. *Espacios*, 40(9), 14. https://www.researchgate.net/publication/332252313_Enhancing_reflection_activity_as_a_conditi_on_for_the_effective_development_of_students'_humanitarian_culture_in_the_process_of_learnin_g_a_foreign_language
- Sysoyev, P. V., Evstigneeva I. A., & Evstigneev, M. N. (2015). The development of students' skills via modern information and communication technologies. *Procedia – Social and Behavioral Sciences*, 200, 114-121. <https://doi.org/10.1016/j.sbspro.2015.08.028>
- Vernadsky, V. (2016). *Biosfera i noosfera* [Biosphere and noosphere]. Book on Demand. <https://www.chitai-gorod.ru/catalog/book/924457/>