Methodological Principles of Poly-Artistic Education of a Person in the Integrated Education System

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Abstract
The article outlines the methodological principles of the artistic education of an individual in the system of integrated artistic education. It is proved that the methodological basis of the integrative processes in education is the philosophical, psychological and cultural conditions and concepts. The determinants of artistic and pedagogical integration necessary for the construction of the integration theory in the field of artistic education and poly-artistic upbringing of the personality are revealed. It is determined that the manifestation of the integration specificity in the field of artistic education is due to the action of psychophysiological mechanisms, and human-centeredness is the fundamental feature of didactic integration. The classification of different categories of integration in pedagogy and didactics is given. The influence of integrative processes on the consciousness and sensory-sensual sphere of a person is considered. It is determined that the psychological preconditions of integrated learning are the peculiarities of human thinking, which organically combines sensual, imaginative-figurative, rational-logical, and creative-intuitive aspects of cognition. The necessity for developing the content of integrated courses and their corresponding technological support is substantiated.

Keywords: Art, Integration, Poly-artistic education, Inter-sensory interaction, Integrated courses, Synesthesia, Artistic culture.
Introduction

Eurointegration changes taking place in Ukraine raise new challenges for modern education, the most important of which is the creation of favorable conditions for the development of a highly educated, creative, and active person capable of integrating knowledge and creating a new, coherent picture of the world. Integration processes in education, which are part of poly-artistic education, promote the development of creative abilities, potential opportunities, aesthetic needs and interests of the individual. In addition, the need for poly-artistic education of the younger generation is due to the processes of global integration that take place, including in the field of art at the level of polystylistic, poly-genre and linguistic interpenetration as a necessary condition for the artistic embodiment of contemporary reality’s images. In this regard, the issue of the individual’s artistic education in the modern context of the cultural space becomes particularly relevant.

Methodology

The purpose of the article is to reveal the main methodological foundations of integration as an important factor in the field of the individual’s artistic education. To achieve this goal, it was necessary to solve the following tasks:

1) carry out a literary review of the problem under study;
2) determine the methodological foundations of integration processes in education;
3) reveal the psychological preconditions of the integrated training;
4) find out the specifics of integration in the field of artistic education and the psychophysiological mechanisms that determine it;
5) substantiate the conclusions and perspective directions for further consideration of the chosen problem.

To achieve the goal, such methods were used that corresponded to the nature of the studied phenomenon and were adequate to the task, namely:

- analysis of scientific literature within the studied problem;
- system analysis and synthesis of psychophysiological mechanisms, which determine the integrative processes in artistic education and the process of poly-artistic education of the individual;
- generalization of the determinants that specify the methodological foundations of the artistic education.

The theoretical basis of the research consists of: the theory of integration (A. Danylyuk, S. Klepko, I. Kozlovs’ka); integration processes in the arts (R. Arnheim, L. Masol, V. Orlov); psychological aspects of integration (V. Romenets, M. Kholodna); didactic integrology (I. Kozlovs’ka); integration processes in primary education (O. Savchenko); poly-artistic education of the individual (L. Masol, N. Miropol’s’ka, L. Predtechens’ka, G. Shevchenko, B. Yusov).

Results and Discussion

The methodological basis for the integrative processes in education is the philosophical position of phenomenology (the ideas of intentionality, the transcendental subjectivity by E. Husserl), hermeneutics (the ontologically positive meaning of the hermeneutic circle of understanding and non-closure of the horizons of the truth comprehension by G. G. Gadamer); the noosphere concept by V. Vernadsky (with its extrapolation in pedagogy through "noosphere education" as a factor of socio-cultural harmonization of society by O. Subetto); axiology (the meaning of the so-called "pure" knowledge in the theory of world’s unity); structuralist humanities concerning the hidden patterns of "transhistorical meanings" – invariant relations (linguistic and culturological) in the dynamics of different systems (K. Levy-Strauss, R. Bart); the concept of communicative rationality – understanding the unity of the world not through the formation of a substantive picture of the world, but through reliance on everyday life practices – universal pragmatics (J.
Habermas). Post-metaphysical thinking operates with the other meaning of "the world" – it's a living, "pre-theoretical" integrity, which is intuitively perceived at all times, and which philosophy "transforms" into a conceptual level. The outlined positions reflect the new styles of contemporary general-thinking – probabilistic (V. Khramova), synergistic (R. Prigozhin, O. Knyazeva), which focus on the study of fundamentally uncertain, multifactorly deterministic integral systems. In the philosophy of holism (founder J. Smuts) there is an attempt to revive the exclusive universalist position of universal unity's comprehension, to restore it after a long autonomy of the culture spheres in the scientific and technological, moral and legal, artistic and other spheres of human existence (Orlov, 2003).

In art, as in science, other spiritual and material spheres, there is a movement from "mono" to "poly" (polyculturalism of the "mosaic" world, polyphony in the reflection of the contemporary world in art), which naturally gives rise to a counter movement towards integration in socio-cultural development and in the field of practical pedagogy of art. Aesthetics as a philosophy of art, in the depths of which there are also various directions of phenomenological, hermeneutic, structuralist, and other researches, begins to play a synthesizing role in the formation of humanitarian knowledge. The aesthetic world of a person integrates natural and social, physical and mental, ethnic and universal. The spread of color music, computer graphics, and holographic experiments in the field of video equipment confirm the predictions of philosophers about the growth of artistic and syncretic phenomena in the cultural space, which can enrich not only the artistic, but also purely vital environment, creating an entire person's aesthetic sphere.

For the artistic and pedagogical discourse, the postulate is essential that integration and differentiation are governed by the universal law of unity and the struggle of opposites, which implies the coexistence of binary oppositions: calmness – activity, order – chaos, analysis – synthesis, etc. The art is also being constructed on such contrasts: dynamics – statics, horizontal – vertical, consonance – dissonance, etc. Extrapolating the above law to the plane of the phenomena correlation "integration – differentiation", we find a two-way process, where these pairs are both relatively independent and closely related, as if they were moving one to the other. Consequently, these dialectical pairs form a peculiar law of symmetry with the inevitable dependence of these two polar principles.

The fundamental property of didactic integration is human-centeredness. The effective methodological foundation for the integration's identification as a psychological and pedagogical phenomenon is the principle of human isomorphism, his/her assurance of the sustainability and invariance of the world and its corresponding perception. In the process of forming a multidimensional human integrity, at any level educational integration is implemented – the minimum or the maximum, qualitative changes in a person become the final "product" associated with the development of integrative-holistic qualities, in particular, the simultaneity, the ability to synchronize use in one time interval of diverse knowledge and operations, the attraction for this polymodal mental processes. Overcoming the contradiction between the integrated-holistic nature of a person and the summation approach to education and upbringing plays the role of the driving force of a person's development.

In the context of accentuation in the educational process, the natural unity of arts in the harmony of their diversity paves the plasticity of the internal organization of the person, his/her perception, thinking, and imagination. The integration mechanisms of the psyche are a kind of triggering mechanisms that stimulate creative thinking. In the process of mastering art on an interdisciplinary basis, the activity of artistic perception and thinking is directed at finding unknown relationships and connections between artistic phenomena that are not on the surface and are not obvious. Artistic knowledge gained as a result of integration experience become regulators of cognitive activity, agents of "mental energy", the whole structure's chain of cognitive activity of the individual from his/her needs, interests, motives to specific techniques of artistic thinking. General methods of thinking are universal in nature; therefore, the techniques of thinking, learned in the study of one subject, for example, art, can be used while mastering
others as ready-made cognitive means. An amorphous vision of individual phenomena turns into the ability to "see with the eyes of the essence," and at the present time learning gains a personal significance (meaning).

The study of determinants of artistic and pedagogical integration is related to the achievements of Gestalt psychology. Representatives of this subfield (C. Ehrenfels, V. Keller, K. Koffka, K. Duncker, K. Lewin) explain the nature of intelligence from the viewpoint of the priority in perceiving a holistic image in the dynamics of mental entities and prove the decisive role of instant "capture" (insight) in the field of parts' gravity to a symmetric whole, their grouping in the direction of equilibrium (Romenets, 2001, p. 80). In the perspective of this theory, the psychological mechanisms of a person's cognitive activity capable of integration are contained in the process of preliminary natural synthesis, which has regulatory and motivational significance for the course of other psychological processes.

The integral psychological concept of a person was crystallized in the legacy of B. Ananiev and V. Merlin. The scientists have proved that the sensory-perceptual organization of the individual is integral, in it, along with the variety of sensor systems, there are also so-called inter-analyzer's connections – the mechanisms of interaction of different modalities (along with intramodal there are intermodal associations connected with the deep layers of the integral structure of the human personality). Psychologists have come to the conclusion that intellectual development is characterized by a tendency of increasing the quantity and volume of correlation bonds both between different properties of one cognitive function and between cognitive functions of different levels (Romenets, 2001, p. 82). This fact was interpreted as a manifestation of the integration effect of various forms of intellectual activity, and the degree of their intelligence development was considered as the criterion for the development of intelligence. For the artistic education field, we consider as fundamental the position of this concept to the fact that the time factor is of great importance in visual functions, and typically the "time" sensation – hearing is a fundamental type of spatial organization. Thus, the psychological basis for integration is expressed in the polymodality of the human psyche, which is generally integral.

Investigating the phenomenology of intelligence, M. Kholodna (2002) explains the integrity of psychic phenomena in the context of structural-integrative methodology, introduces the key concept of "mental experience" of the individual – a system of mental entities and their mental states, initiated by them, which underlies the cognitive relation of a person to the world and determines the unique quality of intelligence (individual-peculiar style), coding of information ("logic", "artist", "romantic", etc.). For artistic and pedagogical research, the scientific evidence of the temporal and spatial components’ unity of the knowledge mental space is of constructive significance.

The systemic approach to the problems of the psyche has had development in the new anthropological subfield of pedagogy, trying to overcome the gap between the components of anthropology (physical, mental, socio-cultural, etc.) and explore the person integrally, in the unity of all facets of measurement. The psychological prerequisites for integrated learning are the peculiarities of human thinking, in which sensual, imaginative-figurative, rational-logical, and creative-intuitive aspects of cognition organically combine. With the help of thinking mechanisms, a person is able to compare close and distant subjects and phenomena, to draw analogies and parallels between them, to synthesize and generalize. In the mind of a student there is no metaphysical division into objects, branches, he/she perceives the surrounding world at the same time hearing and watching, figuratively and verbally, emotionally and practically. The accumulated elements of the experience overlap, integrate, creating the possibility of "panoramic vision" and "polyphonic understanding" of the world.

General psychological patterns of thinking have specific features of manifestation in the field of artistic activity. Spatial, auditory-acoustic, verbal and other sensory-perceptual processes through which artistic information is processed in consciousness, its coding and transcoding take place integrally, each of these
processes can not be disconnected from the diversity of internal and external relations. The systemic nature of the psyche "renders natural resistance" to their mechanical dissociation in the isolated consideration of elements. The combination of the several analyzers’ actions: vision, hearing, touch promotes better memorization of any learning information, regardless of the dominant natural type of thinking. Students with a predominantly artistic type of activity, in contrast to those who have a logical type, "grab" the educational material primarily in a holistic way, simultaneously, without prior division into elements, although the latter — "logic students" — have the ability to generalize figuratively. Synesthesia occurs when in the human mind under the influence of various sensory modalities’ interaction, for example, visual or auditory, there are polymodal images. The objective connection between different feelings becomes a psychophysiological integrator, which, under certain specially created pedagogical conditions (for example, with the regular application of interspecific artistic complexes and parallels) promotes the emergence of associations, analogues of images, harmonious aesthetic representations embodied in different artistic languages — intonational, visual, and kinetic. The field of study of human perception’s polymodalism originated in art, and only then was comprehended by other sciences — linguistics, medicine, psychology.

It is known that in the artistic education analogies and associations play an extremely important role. The notion of "bisociation" is also fundamental to the theory of creative activity. The term "bisociation" helps to determine the difference between the way of thinking within the framework of the "single plan" (association), and the creative act, which always operates more than one plan and is realized at once in several plans. Thanks to the insight (illumination), the spontaneous flash of imagination shows the situation in a new multidimensional light. Opposite outside, these two directions are internally connected: associative thinking operates with parts of a single matrix, and bisociative — matrices, autonomous in character, where the destruction of the boundary leads to the merger of two or more spheres into a unified code (Savchenko, 2007). Art operates using matrix comparison, unlike science, which achieves integrity through gradual changes. Creative syntheses make it possible to get rid of stereotypes.

During the last century, after the problem of synesthesia had been discovered and described as a material of artistic practice, its scientific status was markedly transformed, and it is now proven that the intersensory connection very obviously manifests itself precisely in the field of artistic creativity, and the participation of the synesthetic mechanism in the enrichment of artistic images is seen as an invariant feature of all arts (Romenets, 2001).

Modern scholars of the giftedness phenomenon in the realm of art put a sense of the whole in the first place, which can be manifested differently in music (music mode sensation, architectonic aural skills), fine arts (sense of color, composition), or have a universal aesthetic value (sense of style), since it is proved that the artistic imagination of a person is able to seize the whole earlier than the part by way of an advanced (hypothetical) integration (Romenets, 2001).

According to R. Arnheim (1974), vision is a sensory modality that represents complex spatial relationships, but it is not a passive recorder, a mechanism for sensory scanning, but a tool for the recognition of meanings, which actualizes its productive potential in the horizons of creating visual models, because "the human look is a sudden penetration into the essence".

As proved by researches (Arnheim, 1974; Kholodna, 2002), artistic thinking is a peculiar type of thinking, a complex integrated psychological formation that enables one to understand and create unique values — masterpieces of art.

The intersense interaction of human feelings and mechanisms of simultaneous perception of life and artistic images is "superimposed" on the sub-sensory abilities which are characteristic of children (for example, the special brightness of figurative perception), which necessitates more thorough research in this area of pedagogical psychology and the search for adequate technologies of education and upbringing with the aim of the hidden "artistic synesthesia" resources’ optimization. The subject system of school education with
its information dominant, the cult of "racio" and the underestimation of emotional-figurative and creative aspects leads to the gradual destruction of the child's consciousness natural integrity, which actualizes in the pedagogy the problem of interdisciplinary connections, integrated courses and other models of "restoration of the destroyed integrity".

Thus, the manifestation of the integration specificity in the field of artistic education is due to the effect of psychophysiological mechanisms, so when determining its essence, it is necessary to move "from the person", and not from the subject.

Integration, under which the finding of various relationships and dependencies between the components of the pedagogical system is understood in pedagogy, is an effective means that ensures the systematic presentation of the material in new organic bonds, it is also a means of intensifying the educational process, the highest form of intersubject relationships embodiment at a qualitatively new level.

Didactic integration theory (and the corresponding cycle of educational programs in humanitarian subjects) was substantiated by A. Danylyuk (2000) on the basis of the modified Yu. Lotman's semiotic idea of "conditionally adequate translations" and "transcoding" of various texts. This idea is important for pedagogy of art, where the adequacy of "translation" from the language of a particular type of art is very "conditional". A significant amount of modern theoretical achievements in solving the problem of integration in didactics gave I. Kozlovsky a basis for the introduction the "didactic integrology" concept in the scientific circle (Danylyuk, 2000).

In pedagogy in general and in didactics, in particular, various categories of integration are singled out, this concept has become ambiguous. The generalization of diverse and varied interpretations can be reduced to the following classification:

- integration as the essence, the regularity of education;
- integration as an educational policy (for example, "educational eurointegration"); integration as a principle of education;
- integration as an educational goal ("the picture of the world", "the image of the world");
- integration as a tool, a means of improving the pedagogical process;
- integration of the educational content with the aim of systematizing knowledge (finding a common basis and ways of combining subject knowledge into integrated courses);
- integration of educational and upbringing organization's forms (integrated lesson);
- integration of interaction methods between the teacher and the students (technology).

Practical implementation of the integration idea in school practice is solved mainly in two planes: 1) integration of the content (external and internal, interdisciplinary and subjective, conceptual and worldview, full or partial); 2) integration of educational and upbringing the process (integrative pedagogical technologies).

Integration can be manifested at different levels of knowledge interpenetration:

- objective (horizontal, internal, integration of separate components in the middle of a certain subject);
- interdisciplinary (vertical integration of subjects' groups, combination of elements of diverse knowledge in one course).

The art that emerged from the syncretism of folk culture has, for centuries, revealed two polar tendencies, on the one hand, to differentiation, on the other hand, to integration, due to the natural attraction to genetic "generic unity" (the factor of unity was the archetype of rhythm, present in ancient ornaments, roundabouts, refrains of ceremonial songs). In the culture of postmodernism, the tendency towards the synthesis of types, genres, art styles has become increasingly active. Experiments of artists in order to enrich
the artistic palette lead to overcoming the plane in the painting, static in the sculpture; peculiar spatial-dynamic performances (installation and performance, “happening”, “invironment”) are created. Forms of inter-sensory interaction constantly grow due to the computerization of consciousness; they "provoke" the integrative type of thinking, synthesizing the elements of sound, visual (color) and kinesthetic information in a single virtual reality. Researchers argue that the essence of the present stage of cultural development lies in the dominance of the synthesizing type of artistic and creative thinking; its peculiarity is the continual world perception of a multidimensional space / time, in which the thought opens sometimes the most unexpected and paradoxical connections in the flow of associations (Danylyuk, 2000). Prognostic hypotheses concerning the internal unity of the arts have been tried to be proved reasonably by representatives of various branches of knowledge for centuries, but only today they begin to find their scientific basis, in particular, in the universality rhythms theories, the concepts of three-dimensional musical sound, which combines time, space and movement, the doctrine of the pitch, rhythmic and architectonic level of music.

Integrative processes that penetrate the contemporary artistic culture, expand its general semantic field in the plane of numerous crosses and interactions; they significantly affect the consciousness, and even more on the sensory-sensual sphere of a person, enriching the spectrum of his/her emotional and aesthetic impressions. For the perception of any kind of art, integrating categories are emotion, feeling, pathos, passion, and image. The saturation of the artistic and cultural space with synthetic phenomena of different backgrounds poses serious requirements to the art of pedagogy regarding the adoption of appropriate measures – the development of the integrated courses’ content and their corresponding technological support, which requires changes in methods, forms, means that would harmoniously correlate with the integrative content of modern culture.

Conclusions
Summarizing the above material, we can draw some conclusions. The methodological foundations of artistic education, aimed at the poly-artistic education of the individual, include the following determinants:

- philosophical (ideas of synergetics, holism, aesthetics of universalism, position on binary oppositions),
- psychological (the position of Gestalt psychology, the theory of integral wholeness of human nature and the polymodality of its mental processes, mental experience and the ability to synesthesia),
- didactic (“conditionally adequate translation”),
- cultural and art studies (the statement about the integrity of artistic culture, in which types of art exist in different forms of interconnections and implicitly transmit universals of the world, interpenetration of artistic and linguistic means).

An analysis of the integration phenomenon in the context of related sciences – philosophy, psychology, didactics, cultural studies, and art studies – gives grounds to assert the existence of a sufficient methodological basis for constructing a theory of integration in the field of artistic education and poly-artistic upbringing of the individual.

Prospects for further research. The above information does not pretend to exhaustively disclose this problem. The artistic and pedagogical technologies for the implementation of the integrative approach in school practice, which must be solved in unity with the content component of the teaching system and taking into account the existing artistic and educational environment, need a special study.
References


