Psychosynergetic Foundations of the Educational Process in the New Social Conditions of Preparation of English–Student Medical Students

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ABSTRACT: under quarantine, because of covid-19, social conditions in all spheres of society and not only in Ukraine have changed dramatically. One of them is teaching, in particular, at a medical university. Similar conditions, studies show (Yershova–Babenko and others., 2020), are characterized by an unusually high degree of chaos in several aspects at once. Firstly, in the aspect of an unusual online form of training and teaching. Secondly, in the aspect of unusual forms of social communication with the prohibition of habitual. Thirdly, as a consequence, in the aspect of intrapsychic, brain and cognitive states of a person caused by such conditions. Therefore, formulating the goals of this study, we considered these aspects, correlating them with the consciousness of a person. This required an appeal to an adequate methodological and theoretical foundation. The trans- and interdisciplinary psychosynergetic approach was chosen as the basis for this (1): within its framework, the human psyche, the system of its psychic reality, personality, cognitive sphere and social reality are regarded as psychomeric environments - complex open non-linear self-organizing by definition; in their behavior and state, self-organization and chaos play an essential role as integral steps that lead to dissipative structures that symbolize the emergence of a new order, as well as the ability to produce more complex ones than themselves and demonstrate complex behavior. The conceptual model (philosophical category and principle) “non-linear whole / consciousness-in-non-linear whole / consciousness” - a person, his intrapsychic state, intellectual-emotional activity, society, conditions, educational process (2) and hypertheory (concept) “brain” were also selected psyche-mind / consciousness “(“brain - psyche - mind / consciousness “”. “bpm / c ”) (3) (Yershova-Babenko, 1993; 2005; 2019).

I. STATEMENT OF THE PROBLEM IN GENERAL VIEW AND ITS RELATIONSHIP WITH THE MOST IMPORTANT SCIENTIFIC THEORETICAL AND PRACTICAL TASKS

The announcement of the suspension of classroom contact classes in connection with the coronavirus pandemic (COVID-19) leaves the whole society concerned about the future of students and, of course, learning disabilities. Faster than we thought, community managers, civil society organizations, and the education community came up with the first answer to school closure: distance learning using digital technology. The speed of suggesting that technology helps us in school closure scenarios is related to the experience of other countries in which the pandemic first occurred, such as China, Italy and South Korea.

Face-to-face training is very important, but in pandemic situations like the current one, distance learning is absolutely necessary.

Education is undoubtedly one of the most social human experiences. Therefore, the closure of schools and the development of an action plan for children and teachers at a distance is something completely different than planning personal contact classes at school. One of the main problems associated with online classes is related to the quality of teaching. To adopt this method, educational networks must adapt the teaching methodology to the necessary technological resources. Students should receive adequate and proper education. Schools must ensure that students are supervised, evaluated, and participate correctly. Many schools will be much better able to support the digital experience than others. Technology does not work the same for all age groups. For example, for young children, which should be conducted by their families with guidance for school activities on the Internet, simply online classes do not make sense. Digital technologies should be used in accordance with each segment to strengthen pedagogical work in accordance with the development needs of each age. Most likely, the Coronavirus crisis will lead to the expansion of distance learning as an alternative to traditional full-time education. This puts forward new problems and research tasks for education related to changing conditions, including their aggressiveness and imposition from outside of mandatory actions and restrictions.

Our studies of the influence on the psycho-emotional state of a person of aggressive environmental factors that suppress the continuous long-term external requirements of strict organization of behavior and its control (2002; 2008; 2012; 2018 and others) revealed that there is such a change in one's own internal state that leads to the emergence of extreme disequilibrium. As a result, the mechanism of changing the inner (intrapsychic, intrapersonal) world and human behavior (evaluating oneself with a certain level of adequacy, actions in relation to oneself) is triggered. This also affects the level of external behavior, which can become both negative deviant (offense ...) and positive (creativity ...).

Altered behavior of a person is confronted with intrapersonal and social conditions and informational and emotional stresses that change under his influence. The latter, in turn, again affect the state of the internal (intrapsychic, intrapersonal) world of a person, etc.

As a result, the human psyche, his mental-emotional-spiritual state becomes unstable (stress, illness, panic attacks), which has been in a long time (I.V. Yershova-Babenko, 2005; 2019 and others).

Thus, the socio-philosophical and psychological-emotional aspects of the problem of socialization are associated with the educational sphere, as such, which provides effective mechanisms and strategies for the formation of modern man. Therefore, the introduction of the “bpm / c” hypertheory (Yershova-Babenko I.V. 2019), chaos theory in the aspect of psychosynergetics and chaotization of the psychomerity of social reality (Yershova-Babenko, Seliverstova, 2019; 2020) has consequences both for the reform of the educational space and for social philosophy [5].

In accordance with this theory, the psyche as a hypersystem of a synergetic order expresses at the same time such a phenomenon as a nonlinear synthesis of its constituent media, which by definition also belong to the class of open nonlinear self-organizing media. Within the framework of this understanding of the psyche, the mutual influence, for example, of informational / semantic and emotional flows produced by a person occurs
on the basis of coherent nonlinear positive feedback and is accompanied by their strengthening, including inside the person himself, at the level of his intrapsychic world.

Proceeding from the aforementioned way of solving the problem of human social and intellectual adaptation in a rapidly changing world, maintaining spiritual balance in a sea of conflicts, they are closely related to the principles of psychosynergetics, the need to switch from cognitive-accumulative to cognitive-creative, semantic level of information transformation by a person, moreover, creating your own sense - forming level of competence, and not just knowledge.

II . ANALYSIS OF LITERATURE ON THE TOPIC, SPECIFICATION OF TASKS AND RESEARCH

In his work “The Lost Paradigm. The nature of man” E. Morin, analyzing the preferential role of education as a stabilizing factor in society, writes that “modern man has two polarities: mind and madness. The modern world is a world of madness, when the correlation of mind and passion is mutually penetrating and complementary. The task of modern education is to create the right vector for the accumulation of passions” [4, p. 90]. The philosopher sees the realization of this task in understanding the priority trends of modern education.

In our opinion, they also follow from the above provisions of psychosynergetics: to contribute to the adaptation of the human psyche to the conditions of a multidimensional, changing world; create new strategies for maintaining the mental health of a person; look for new psychological mechanisms of influence on the behavior and thinking styles of modern man; contribute to the socialization of the individual, the development of its desire for self-realization and self-improvement. In other words, today it is necessary to prepare a personality of a new type, which will be able to “see the future”, given precisely the chaotic processes and the unpredictability of changes and risks in society.

It is obvious that in order to provide opportunities for normal life support of a person, his efforts must be redirected to a greater extent to the ability to change the information and emotional, intellectual and emotional load at the intrapsychic level. Since the producer of the aggressive nature of the informational-mental-activity-emotional environment (IMDES) is the person himself, it is likely that efforts aimed at changing the psycho-mental-emotional state, unlocking a person’s capabilities through the formation and development of fundamentally different skills, abilities and competencies of intrapsychic activity at these levels, including a different attitude of a person to the nature of the environment being formed by him.

In this regard, the important question is: what methodological and methodological tools are more appropriate to use when analyzing, studying the aggressive nature of the environment, its levels such as information, semantic and emotional, intellectual, mental and spiritual. No less important are such practical questions: what kind ability to discover what skills, abilities, and competencies to form and develop a person of the twentieth century and how to do it efficiently, but not aggressive. [2] The theory of social self-organization and chaos in the psychomic aspect of social reality opens up opportunities for a new conceptual, theoretical, methodological and practical solution to such fundamental social problems as the nature of social changes (revolutions) and crises, the determinism of cultural and historical development, its essential forces and factors, criteria social progress and opportunities for social management and forecasting.

In modern philosophy, the ideas of synergetic have a foundation in the philosophy of formation, the concepts of an open world, the ideas of the co-evolution of nature and society, universal evolutionism. In [1], the ontology of social chaos in the process of self-development in social reality is considered and its stages are defined: social crisis, social explosion and destruction stage. Social chaos can occur at different hierarchical levels of the social system / environment and reality. The higher the complexity of building a social system, the more it manifests not a tiered organization, but an end-to-end self-organization that exists in it in parallel with these levels, as well as the process of transition to a state of social chaos and ambiguous exit from it (not the same way, just the opposite). This acquires in it a specific pattern of similarity of a regular nature. However, it is positive that chaos can be considered as the medium of the emergence of a new social order, as a dissipative structure of a new order according to Prigogine (social catharsis).
The concept of “social entropy” is inextricably linked with the concept of “social chaos,” which helps explain and clarify the latter. The essence of social entropy is the growth of social chaos, the destruction of the functional consciousness of society and the imbalance of the system, which in the latter cases can lead to its complete destruction or loss of systemic qualities and manifestation of environmental qualities. It has been established that most often social entropy is defined as the degree of disorder of the social system [1].

The introduction of psychosynergetics as a theory of psychomeric self-organization, based on synergetic (Haken, 80), the theory of changes and dissipative structures (Prigogine, 1947; 1986) and other post-non-classical positions, has become important for modern education, as it offers a new look at the educational process as having a complex nonlinear nature, formation development, has bifurcation points, which imply vectoriality and alterativeness. “The synergetic theory of self-organization can be considered the most complete, integral theory of order and chaos, since it examines the various phases (stages) of the evolution of order (its occurrence, development, complication and destruction), as well as manifestations of the different roles of chaos at these stages” [7, from. 188-189].

According to M. Fedorov, problematic situations are possible in the educational process, which are uncertain and chaotic, since they do not have a single solution or approach, but they are not destructive. On the contrary, one must learn to use this chaos in a constructive, creative direction: “it is from the synergetic point of view that there is no absolute structurelessness, absolute disorder; even chaos becomes a subject of science, when chaos, randomness, and disorganization can not only be destructive, but also in certain circumstances contain a creative and constructive beginning, so a synergistic concept can contribute to a deep understanding of such complex, non-linear open systems that develop as a society, its various subsystems, including education systems ”[8, p.29-30].

Thus, the use of psychosynergetics allows a slightly different understanding of the learning process, its various stages and phases. First of all, it provides for new models of pedagogical activity of the teacher himself, so the question arises of a new level of teacher training for both the individual and the professional. Indeed, in the psychosynergetic approach, much attention is paid to taking into account psychomericity in personality development, which can now be applied to pedagogy. This will help to identify the main components of the teacher’s personality development: “at the micro level, the personality becomes the subject of self-development”, with its unique individual image, highly developed spirituality; at the mesoscale, as a subject of professional formation, the main feature of which is the presence of an integrated complex of professionally significant characteristics (qualities, traits, beliefs, ideals, values); "at the macro level, as a subject of civilization, whose universal characteristics are noospheric thinking, planetary consciousness, multiculturalism, a humanistic culture, citizenship, tolerance, etc.” [9, p. 39; 10].

The problem of creating an educational space taking into account new realities and the use of psychosynergetics in education also solves the problems of social complexity. As I. Nechitailo rightly stated: “The completeness of the process of socialization in a university can be achieved by structuring the educational space in such a way as to ensure that students are immersed in a set of social interactions of different difficulty levels that enrich the areas of mastered social roles” [6, p. 78]. This can be achieved through the content of educational programs, which not only contain a list of necessary subject knowledge and skills necessary for training, but also constitute a “set of cultural values and models that are spontaneously transferred to the educational environment, system”, relationships and relationships, models collective actions that are formed in the process of educational communication on the basis of values and norms that are actually implemented in this environment ”[6, p. 78]. Therefore, in education today, communication is aimed at creating not the final, but “soft” socialization of the individual, which allows her to confidently master a certain social role and enter into complex social relations in society in specific modern conditions, that is, organize her own communication based on openness, nonlinearity and complexity [11].

### III. PURPOSE AND TASKS OF WORK

A study of the nature of the educational process in radically new socio-psychological conditions of sharply altered social and psychological reality, manifestations of chaos and the specifics of psychomericity...
caused by the Coronavirus crisis in terms and from the standpoint of psychosynergetics (by the example of training medical students, masters, including English-speaking as especially acutely aware of these conditions due to doubling stress, because they are in another country).

Development of a methodological model of teaching and organizing the educational process, taking into account the specifics of new social conditions, based on the K-method prof. Yershova-Babenko “Creating Power” (“Creative Power”) and its K-techniques.

IV. BASIC RESEARCH MATERIALS

The educational process at its core looks quite simply: there is one who teaches and those who need training, and you just need to provide the proper conditions for learning and the learning process will take place. In fact, in modern society, the educational process is much more complicated due to the growth of unpredictability and chaotic conditions in different fields, which makes this process more and more probabilistic and random. In modern conditions, it can be compared with the well-known "butterfly effect" discovered by K. Lorenz to predict weather conditions. As M. Swikard, a specialist in the educational system in the USA rightly believes, “In education, we know that children will learn, but how much each of them can learn in a certain time? ... Despite the testing practice that has been introduced, we cannot really say the teacher did everything possible to guarantee proper training”[3; 5].

The issue of the organization of teaching and learning in conditions with a specified degree of randomization has a scientific novelty and high relevance not only for Ukraine. It is especially possible to single out the medical side of the conditions under consideration, namely, the issue of mental health of students and teachers (teachers). In order to intensify the processes of learning material, memorizing it and increasing interest, maintaining a persistent motivation of students to study material in classes in the humanities and medical and pharmacological disciplines in these conditions, we are considering new forms of work based on the use of the author’s K-method prof. Yershova-Babenko “Creating Power” (“Creative Power”) and its K-methods (2005; 2015). This work sets out the experience of using such a creative type of educational activity as the independent creation of a video abstract and a spatio-temporal abstract (PAC) by students — homework, followed by use in another educational form — protecting the essay in front of an audience and presenting a programmatic issue based on demonstration of one’s PAC (on - line mode). The basis is long-term experimental and theoretical studies of psychological, psychological, pedagogical and methodological, cognitive, methodological and socio-philosophical aspects (Yershova-Babenko, 1986; 1992 and others; Yershova-Babenko, Kozobrodova, 2019; Yershova-Babenko, Seliverstova, 2020; dissertations in the field of “General Psychology and ...”; “Dialectics and the theory of knowledge”; “Social Philosophy and ...”; “Philosophy”, conducted under the guidance of I. Yershova-Babenko: Kornienko, 2007; Bashmakova, 2008; Kokorina, 2009; Medyanova, 2013; Khanzhi, 2014; Madinova, 2016; Krivtsova, 2018; Kozobrodova, 2019;). The student addresses the program recommended by the teacher, for example, the medical profile on YouTube. A creative task is given: based on the materials of the viewed program, make a video report for 4 minutes lasting. Subsequently, the video abstract is defended at a seminar and in writing is presented on the standings. So, these types of tasks are included in the program. Since one of the training courses under consideration consists of two modules (philosophy, aesthetics), it is enough for the student to have a video essay on each topic of the course.

In connection with the specific conditions for conducting classes online and weakening the concentration of attention among students, weakening the mechanism of retaining large amounts of information in memory, a new type of abstract was developed and applied. Instead of the usual textual form, it focuses on creating a compositional organization of information in the student’s memory along three axes of emphasis - the axes of time, space and their derivative. Such organization of information in memory leads to the volume and mobility of the form of its storage, to concentration, and significantly increase the effect of memorization with the creation of an utterance, rather than simple reproduction, after a long time. In parallel, an experimental study was carried out, which showed a significant increase in the retention in memory of acquired knowledge and skills, the formation of cognitive competencies. One of the positive characteristics is that the student creates the
“PVC” with his own hands and he continues it from class to class, placing it on one large sheet, for example, of a Whatman paper. On one axis, point-place is plotted, on the second axis, the point-date of the event, and at the intersection of two vectors drawn from these two points on two axes, a point is formed that represents the event. She gets the name of the person associated with the event and there is written in a few words the contents of the event. In particular, in the course of teaching philosophy to dentists, 2nd-year masters (course “Aesthetics” for designers, 4th-year college), the PVC methodology was implemented as follows: the philosopher’s date of birth, his place of birth, his name, what he wrote and what he created a philosophical school. For students, these new types of work aroused interest and, more importantly, showed good results.

V. CONCLUSIONS AND PROSPECTS

As a result of the development of psychosynergetics, it has become possible to accept the scientifically based fact that such systems / environments as social reality, society, a person, his mind and psyche, brain and thinking, social and other levels of behavior (informational, cultural, political, educational, evaluative, emotional, etc.) are psychomorphic and belong to the class of complex open non-linear self-organizing systems / environments. Therefore, social chaos and social self-organization as a phenomenon of social reality, including educational processes, are more due to transformations, fluctuations, phase transitions within the intrapersonal environment of the subject of social action, than any external factors. In modern education at its various levels (primary, secondary, higher ), the question arises of new learning models based on the principles of self-organization and randomization, which define a person, society and culture as non-linear, open, self-organizing systems / environments that exist only in a narrow range of randomization both the environment itself and the conditions of its existence. Social self-organization and social chaos in social systems / environments are relevant aspects of the study of social complexity.

This allows us to propose one of the solutions to new problems and tasks in the educational process, caused by the crisis of Coronavirus and associated with changing conditions, including their aggressiveness and imposition of mandatory actions and restrictions from outside.

Our studies during the crisis of Coronavirus showed the specific nature of the educational process in radically new socio-psychological conditions, which is expressed by sharply altered social and psychological realities, manifestations, including extreme chaos, imbalance of human conditions and conditions, and especially of students at the level of psychomericities.

The study was carried out in theoretical and practical aspects, for example, the training of medical students, masters, including English speakers, who are especially acutely aware of these conditions due to doubling stress, because they are in another country.

It showed the appropriateness of application and allowed to obtain confirmation of the adequacy of the psychosynergetic approach, its principles and the conceptual model of “non-linear whole-in-non-linear whole” in the new conditions of social reality in three aspects: 1) in the aspect of an unusual on - line form of training and teaching; 2) in the aspect of unusual forms of social communication; 3) in the aspect of intrapsychic, brain and cognitive human conditions caused by such conditions (testing hyper theory I. Yershovoy- Babenko « brain - psyche - yet Mind / consciousness » ( " bpm / c ") in the educational process).

A methodological and technological model of teaching and organizing the educational process that takes into account the specifics of new social conditions based on the K-method prof. Yershova-Babenko “Creating Power” (“Creative Power”) and its K-techniques, including the “PVC” technique.

An analysis of the results showed an improvement in the quality of teaching and learning outcomes, which is the basis for recommending the implementation of the developed model.

In the future, the obtained results of a theoretical, methodological and methodological and technological nature can be applied in the educational process in a wide range of disciplines and studies.
REFERENCES


