THE SIGNIFICANCE OF MINDFULNESS-BASED EDUCATIONAL METHODS PROVIDED BY COGNITONICS FOR POSITIVE PSYCHOLOGY MOVEMENT

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ABSTRACT

The positive psychology movement was born in the 2000s, it shifts the accent from repairing weakness to the enhancement of positive qualities of the personality and preventing the problems before the moment when these problems arise. The publications on positive psychology allow to distinguish a factor being especially beneficial to well-being, this factor is called mindfulness. Cognitonics is a new scientific discipline aiming at compensating the negative shifts in the cognitive-emotional development of the personality caused by stormy progress of information and communication technologies and globalization processes. The paper sets forth the deep connections of cognitonics with the positive psychology movement. It is shown that cognitonics suggests a system of original, mindfulness-based educational methods supporting well-balanced cognitive-emotional development of the personality in modern information society, it is called the system of the methods of emotional-imaginative teaching (the EIT-system). The analysis of central ideas of the EIT-system provided the possibility to enrich developmental psychology: the basic model proposed by P.D. Zelazo (2004) considers 4 levels of consciousness development (corresponding to the age from one to four years), and this paper introduces three new levels.

1 INTRODUCTION

During the last decade many scholars at various international and national conferences, in the books and papers have said and written about serious distortions in the development of the personality (first of all, in the system of moral values) and national cultures caused by stormy development of information and communication technologies (ICT) and globalization processes.

Digital space should be subjected to the living space, digital society to the society, and there should be a balance in value between society/digital society and environment in the world’s conceptual picture of the humans. The priority of the human values and spirituality in the digital epoch is obvious. The conviction that it is not only necessary but also possible to make something constructive and significant for compensating these distortions has underlain the elaboration of the foundations of a new scientific discipline called Cognitonics [4-7]. At the moment, the constructive core of Cognitonics is formed mainly by the Theory of Dynamic Conceptual Mappings (the DCM-theory) and the System of the Methods of Emotional-Imaginative Teaching (the EIT-system) [1-9].

The paper sets forth deep connections of the DCM-theory and the EIT-system with the positive psychology movement. This movement fulfills a shift from the accent on repairing weakness to the enhancement of positive qualities of the personality and preventing the problems before the moment when these problems arise. The publications on positive psychology allows to distinguish a factor being especially beneficial to well-being, this factor is called mindfulness. It is shown in the paper that the EIT-system provides a mindfulness-based educational programs and, as it seems, it is the first program of the kind. The analysis of central ideas and methods of the EIT-system provided the possibility to enrich developmental psychology: the basic model proposed by P.D. Zelazo [17] considers 4 levels of consciousness development (corresponding to the age from one to four years), and this paper introduces three new levels.

2 POSITIVE PSYCHOLOGY MOVEMENT AND THE CONCEPT OF MINDFULNESS AS A REACTION TO THE REALITIES OF INFORMATION SOCIETY

During the 1990s, it was possible to observe the steady growth of the number of children at school age in the developed countries encountering various social, emotional, and behavioral problems. Numerous observations provide the possibility to conjecture that, to a large extent, it was a consequence of more intensive interaction with computers at lessons and at home and of stormy Internet’s expansion. Besides, the criminal films and horror films continued to negatively influence the mental state of very many children and adolescents, in particular, causing anxiety and aggression. These negative shifts became sufficiently noticeable by the beginning of the 2000s. According to [15], approximately one fifth of children and adolescents experienced problems showing their need for mental health services.
One of the consequences of this conclusion was the increased attention of the scholars to clarifying the extent of exposure to and use of media and electronic technology by very young children. A large-scale study described in [16] showed, in particular, the following alarming facts: (a) 27% of 5-6-year-old children used a computer during 50 minutes on average on a typical day; (b) more than one third of 3- to 6-year olds also have a television in their bedroom; 54% adults said that it frees up other TV in the house, that is why other family members can watch their own shows, 38% of adults indicated that it keeps the child occupied, so the parents can do things around the house.

As a principal way out in the current situation with mental health of the young generation, many psychologists indicated the importance of promoting children’s social and emotional experience in schools. As a consequence, a new paradigmatic shift was observed in psychology: a shift form the accent on repairing weakness to the enhancement of positive qualities and preventing the problems before the moment when these problems arise [14]. As a result, the positive psychology movement was born, the principal objective of this movement is studying the positive features of humans development, in particular, investigating such significant traits of the person as “subjective well-being, optimism, happiness, and self-determination” [14, p. 9].

As a logical consequence, the task of promoting positive emotions in children and adolescents was posed [10]. The evidence obtained in the 2000s shows that a critical role in the success of children in school and in their social and emotional competence is played by self-regulation, in particular, by controlling attention and inhibiting aggressive reactions.

The publications on positive psychology allow to distinguish a factor being beneficial to well-being, this factor is called mindfullness [11]. According to the definition given by Schonert-Reichl and Lawlor [12], it is a way of directing attention. Generalizing a number of available definitions of this concept, mindfulness can be characterized as the ability to maximally proceed from the context while taking decisions in any situations. It is the ability of paying attention to many details while elaborating a decision but not only “mechanically” following a number of prescribed rules, etc.

3 INFORMATIONAL-AESTHETIC CONCEPTION OF DEVELOPING COGNITIVE-EMOTIONAL SPHERE OF THE LEARNERS

The analysis of scientific literature provides weighty grounds for concluding that the first educational system satisfying the criteria of a mindfulness-based program was born and well tested several years before the emergence of the term “mindfulness-based educational program”. Such criteria are satisfied by the system of the methods of emotional-imaginative teaching (the EIT-system). The core of the EIT-system was elaborated by O.S. Fomichova in the first half of the 1990s and has been expanded in the second half of the 1990s and in the 2000s. This system is underpinned by our Theory of Dynamic Conceptual Mappings (the DCM-theory). This theory is stated in numerous publications both in English and Russian, starting from the paper [1]. Both the DCM-theory and the EIT-methods form a principal part of the cognitonics constructive core.

A main component of the DCM-theory is an original informational-aesthetic conception of developing the cognitive-emotional sphere of the learners: young children, teenagers, and university students. The central ideas of our conception are as follows.

1. It is important to actively develop a broad spectrum of information processing skills of the child, starting at least at the age of five. It applies, in particular, to associative abilities, the skill of integrating information from various sources, and the ability of establishing time-causal relationships between the events (see [2, 3]).

2. It is very important to combine the development of information processing skills with inscribing, in a systemic way, the feeling of beauty into the world’s conceptual picture of the child. Proceeding from our experience accumulated during 23 years, we consider the following educational processes as the principal instruments of achieving this goal:

   - early support and development of figurative (or metaphorical) reasoning;
   - teaching young children (at the age of 5 – 6) very beautiful language constructions for expressing the impressions from the nature;
   - a unified symbolic approach to teaching natural language (mother tongue and a foreign language), the language of painting and the language of dance [2-3, 5-7, 9].

3. Passing ahead the development of soul in comparison with the development of reasoning skills. A well-developed feeling of beauty plays an especially significant role in the realization of this idea. Besides, it is very important to be aware of the fact that children should have enough time for the development of soul: the time for contemplation, for imbibing the beauty of the nature, etc., i.e. children should have time for self-paced activity [7].

4. The principal cognitive precondition of successful (as concerns a long-term perspective) acquainting children with computer is the realization of the Thought-Producing Self of the child. It means that the child should know that his/her thoughts may have a high social significance, that is, be appreciated by his/her peers, by parents, grandparents, the teacher, etc. (see [4-8]). The child should be aware of this fact before the time when the adults start to systematically acquaint him/her with computer.

5. Due to mastering modern ICT: cell telephones, internet, etc., the consequences of children’s negative actions may be very severe. That is why it is necessary to find the ways of much earlier socialization of children in the modern information society in order to eliminate or considerably diminish their aggressiveness and to contribute
to the awareness by children of the real scale of their misuse of ICT.

For the realization of these ideas, an interdisciplinary educational program has been developed by O.S. Fomichova. The elaborated program is intended for teaching children during twelve years, where the starting age is five to six years. The program has been personally tested in Moscow with great success by O.S. Fomichova over a period of 23 years. The total number of successfully taught students (young children and adolescents) exceeds eight hundred. The composition of the program is described in [5–7, 9].

4 BASIC STAGE: DEVELOPMENT OF CREATIVITY AND BROAD BEAUTY APPRECIATION

The foundation of educational activities aimed at achieving the objectives of our informational-aesthetic conception of developing the cognitive-emotional sphere of the learners is the first stage of supporting and developing the reasoning skills and creativity of the child. A map of cognitive transformations (see [5, 6] realized at this stage is presented on Figure 1. The maps reflecting the next cognitive transformations can be found in [5].

One of the distinguishing features of our approach to this problem is that it is realized at lessons of a foreign language (FL) – English, where the mother tongue of children is Russian. The use of original analogies (being the parts of fairy-tales and thrilling stories) for teaching the English alphabet, the rules of reasoning, and the basic rules of English grammar contributes to developing associative abilities of children at the age of 5 – 6. The EIT-system provides an environment of conceptual learning instead of a memorization-based one. In particular, it is the principal distinguished feature of the developed original approach to teaching FL as an instrument of thinking.

Example. A difficult problem is to explain to very young children why the verbs in the 3rd person of Past Simple Tense have no ending "s", but the same verbs in the 3rd person of Present Simple Tense do have such ending ("reads" but "read", etc.). An interesting story from one of the previous lessons associates in the consciousness of the child the ending "s" with a bow. The teacher explains that her young students were in the Past babies and had no hair (were bald). Hence it was impossible to tie a bow. That is why verbs have no ending "s" in the 3rd person of Past Simple Tense. The 5-year-old students accept this explanation with great joy and remember it very well. As a result of having heard the stories of the kind, young children become aware of the fact that symbolic objects have the meanings pertaining to the real or fairy-tale life.

The interesting stories about the life of verbs and other words establish in the consciousness of the young child a mapping from the objects and situations of the real life to the domain of language entities (verbs, nouns, pronouns, etc.). That is why the consciousness of the young child receives a considerable impulse to developing the ability to establish diverse analogies.

The other reason for using the lessons of FL is that (as a 23-year-long experience has shown) young children easier learn beautiful language constructions for describing the impressions from the nature than the equivalent constructions in mother tongue (see [2, 3]). The explanation of this phenomenon is that in the first case children don’t feel any contradiction with the every-day use of language.

Example. Let’s consider a fragment from the home composition “The Winter Day”, it was written in English by an eight-year-old Russian speaking student Polina of the third year of studies in experimental groups:

THE KINGDOM OF THE WINTER

One winter day I was sitting near the window looking at the street covered with fresh clean snow. At first time, there was nothing so remarkable in that. Nor did I think it so very much out of the way to see that falling snowflakes, snow storm, the grey cloudy sky and the noisy crows. But when afterwards in the evening going to sleep I thought it over, it occurred to me that I ought to have wondered at this. I thought that the snow storm might be a wicked magician Winter, the grey sky with running clouds – his kingdom. Every beautiful princess that refused to be his wife because he was very angry and cruel was turned by him into a crow. And then their tears he turned into the falling snowflakes. And only the coming of the kind Fairy Spring can destroy this magic.

5 A KNOWN FOUR-LEVEL MODEL OF CONSCIOUSNESS DEVELOPMENT

It seems that the model proposed by Zelazo [17] can be considered as a good working instrument for studying the development of conscious control during the first – fourth years of childhood. This model, called the Levels of consciousness (LOC) model, emerged as a result of reflecting the experimentally discovered regularities of the development of conscious control of thought, action, and emotion. The model describes four transitions from one LOC to another, higher LOC, these transitions depend on age. Let us say about the zero LOC in case of newborn babies and very young children at the age less 11 – 12 months. Zelazo [17] characterizes the consciousness of this period as minimal consciousness; it is responsible for approach and avoidance behaviour based on pleasure and pain and is present-oriented, unreflective and doesn’t operate with the Self-concept.

The principal distinguished feature of LOC1 is the emergence of concepts and of the connections between the perceived objects and concepts (playing the role of labels of experienced objects). LOC1 is called by Zelazo [17] as the level of recursive consciousness. LOC2 emerges at the end of the second year, the essence of the transition from LOC1 to LOC2 consists in the emergence of symbolic thinking, in children’s awareness of Self. The signs of LOC2 are the first use of personal pronouns by children, their self-
recognition in mirrors. Besides, children feel first self-conscious emotions, first of all, shame.

A collection of interrelated analogies (in fairy-tales and thrilling stories) for teaching 5-7-year-old children to read in a foreign language (English)

- Learning the English alphabet and the rules of reading
- Learning the basic rules of English grammar with the use of analogies
- First stage of developing associative abilities of the child has been realized
- Children at the age of 5-7 are able to fluently read (with understanding) the texts in English
- Teaching to understand the metaphors
- Studying beautiful language constructions for describing the impressions from the nature
- Teaching to compose the metaphors
- The agitation of the child has been diminished, because he/she can express the emotions
- The first stage of developing figurative (metaphoric) reasoning of the child has been realized
- The number and intensiveness of conflicts in the process of up-bringing have been considerably diminished
- The Thought-Producing Self of the child has been realized
- The initial cognitive preconditions of successful work in art, mathematics, design, marketing, etc. have been created
- The cognitive-emotional preconditions of teaching the child to interact with computer have been created

Figure 1: A map of cognitive transformations corresponding to the basic stage of developing creativity.

LOC3 is called by Zelazo [17] as reflective consciousness 1, usually this level characterizes the consciousness of three-year-olds. The manifestation of this level is the ability of children to systematically use a pair of arbitrary rules (for instance, the object of big size and of small size) for sorting the pictures representing these objects. However, the executive function of three-year-olds is still limited, it was shown by the experiments with Dimensional Change Card Sort. For being successful in this game, children must integrate two incomparable pairs of rules into a single structure. This ability characterizes the LOC4, called by Zelazo [17] as reflective consciousness 2. Usually, LOC4 emerges by the end of the forth year, this level is also characterized by a spectrum of meta-cognitive skills.

6 EXPANSION OF THE LEVELS OF CONSCIOUSNESS BASIC MODEL IN COGNITONICS

It seems that the broadly felt necessity of promoting children’s emotional and social competence in schools and the lack in the scientific literature of rather simple solutions to this problem are the grounds for putting forward the following conjecture: the levels of consciousness model proposed by Zelazo [17] indicates only some basic stages of consciousness development. The goal of creating appropriate theoretical foundations of promoting children’s emotional and social competence will lead to discovering additional, higher stages of the child’s consciousness development corresponding to mature emotional and social competence of the child.

Realizing this idea, let’s give a new interpretation of the methods of developing conscious control of thought, action, and emotion described in [5-6] and belonging to the System of the Methods of Emotional-Imaginative Teaching. We’ll suppose that these methods underpin the transition from the level of consciousness 4 (LOC 4) to LOC 5, from LOC 5 to LOC 6, and from LOC 6 to LOC 7. The new levels LOC 5, LOC 6, and LOC 7 will be respectively called the level of broad beauty appreciation, the level of appreciating the value of thought, and the level of enhanced awareness of social agreements and social responsibility.

A very short, preliminary description of these levels is as follows. Reaching LOC 5 by the person means that this person possesses a well-developed feeling of beauty in various manifestations: the beauty of a thing, of an idea, of an expression, of a picture or sculpture, of the interpersonal relationships, etc. [5-7, 9].

The successful transition from LOC 5 to LOC 6 means that (a) a child is aware of the fact that his/her ideas may be socially significant, i.e. the child may be appraised by the friends or adults for the originality and beauty of his/her idea; (b) a child appreciates the value of the thoughts of other persons [5-7, 9]. Reaching LOC 7 by a person means that this person is sufficiently mature in the social sense, i.e. possesses an enhanced awareness of social agreements and social responsibility [5-7, 9].

The method of reaching LOC7 proceeds from the central idea of J.R. Searle [13] about natural language as the primary means of constructing social reality and considerably expands and works out in detail this idea.
It should be underlined that modern preschool and school educational systems in various countries encourage only a rather small proportion of children to reach the 5th - 7th levels of conscious control. But to considerably increase this proportion is vitally important for successful socialization of children in information society. Happily, at least one broadly applicable way of solving this problem has been available since the 1990s, it is given by the EIT-system.

7 CONCLUSION: BROAD PROSPECTS OF USING THE DEVELOPED EDUCATIONAL METHODS

The EIT-system has been mainly realized at lessons of English as a foreign language for Russian-speaking children and at the lessons of poetry and literature in English, at lessons devoted to explaining the symbolic language of painting, the culture of communication, and the symbolic language of classical dance. These kinds of lessons are considered in numerous countries as highly appropriate for young children and teenagers. The carefully selected collection of texts used at lessons is provided by a number of classical, world-known fairy-tales and novels, in particular, “Snow White”, “Cinderella”, “Sleeping Beauty”, “Pinocchio”, “Pollyanna”, “The Life and Adventures of Santa Claus” by L. Frank Baum, “Alice in Wonder Land” by Lewis Carroll, “The Wind in the Willows” by Kenneth Grahame, “The Hundred and One Dalmatians” by Dodie Smith, etc. That is why the EIT-system may be used (after a certain adaptation requiring a small time) in English-speaking countries and in numerous countries where the English language is learned as a second language.

References


