

R. I. Shvay*Lviv Polytechnic National University**e-mail: Roksolyanash@yahoo.com; ORCID: 0000-0003-3859-5196***DEVELOPING VIVID THOUGHT AS A STEP TO CREATIVITY**

Creative process as a ramified system of possible actions requires production of new images which later get transformed into notions, judgments, strategies and tactics for solving creative tasks. Image which plays the role of impressing may stimulate creativity as a derivative of excitement refracted through the motivation structure. Image is an excitement trigger and basis for formation of impressing. Image is a result of imagination which provides for the development of the right hemisphere and triggers multiple context thought. The main function of imagination is its participation in creativity process. Right-hemispheric activities, establishing multivalent connections, together with vivid thought contribute to recovery of enquiry and research activities. In this sense vivid thought becomes one of the most significant criteria of creative activity. Image is a result of accumulating a sensual (objective) experience which results in creation of data base for taking standard actions and decisions. Images of previous actions become patterns not only for a standard decision but also for taking a non-standard one in future. Images which have been connected by our consciousness with a particular way of behaviour in certain life situations need to be transferred onto a similar or new situation, thus inciting to cognitive interest. Application of creative pedagogy in educational process contributes to the development of vivid thought and search activity.

Key words: creativity, image, impressing, methods of creative pedagogy.

Traditionally, studying is connected with formation of patterns (schemes, images) appropriate for certain objects, i.e. with accumulation of knowledge stored in a certain way. Each of the formed images is an element of the general world image which functions as an integral, multilayer system of one's concept about the world, other people, oneself, and one's actions.

According to O. Leontyev, images of the objects from the surrounding world are produced by the inner – both conscious and unconscious – thinking activity. Without this activity we would not perceive the objective world. At the same time, however, we would not conceptualize this world be it not opening to us in its sensually given objectivity. This indicates the significance of emotional and sensual attitude to the world [3].

The meaning of hemispherical spatial and figurative thinking for the development of creative thinking has been analyzed in the article.

Impressing (as imprints in the memory made by some strong and deep sensations from the impact of outer environment in certain «critical» moments of life) for a longer period of time, and sometimes even for the rest of life determines the basic motives and goals in human activity. Anything can turn into an impressing – a minor phrase, a piece of music, an interesting story, an outburst of imagination, a figure of imagination which touched the innermost heartstrings and since then never let them go, and since then accompanies a person for a lifetime helping him/her to overcome everything and to achieve unprecedented results which others shall define as a talent, a genius.

Image which plays the role of impressing may stimulate creativity as a derivative of excitement refracted through the motivation structure.

Let us look at the functional aspects of image perception:

1. Image is an excitement trigger and basis for formation of impressing.

2. Image is a result of imagination which provides for the development of the right hemisphere and triggers multiple context thought. The main function of imagination is its participation in creativity process. Right-hemispheric activities, establishing multivalent connections, together

with vivid thought contribute to recovery of enquiry and research activities. In this sense vivid thought becomes one of the most significant criteria of creative activity. Right-hemispheric, i.e. spatial and figurative, mode of thinking is simultaneous (concurrent and synthetic). It provides a momentary snapshot of numerous qualities of multivalence. It is the latter (i.e. multivalence) that lays foundation for any creativity. Vividness plays a significant psycho-hygienic role in studies, upbringing, and life in general. This way one can build up personal meanings of the objective world which at the beginning is not open in its sensually given objectivity. A previous idea makes it possible to adapt a new one.

3. Image is a result of accumulating a sensual (objective) experience which results in creation of data base for taking standard actions and decisions. Images of previous actions become patterns not only for a standard decision but also for taking a non-standard one in future. Images which have been connected by our consciousness with a particular way of behaviour in certain life situations need to be transferred onto a similar or new situation, thus inciting to cognitive interest. Such ways of behaviour determine general search routes for solving any task. Images of life experience, previous standard actions and decisions accumulated and processed by the brain may reduce to the state of contraction. A dynamic process of interaction between the inner stimuli and outer factors takes place, and this process influences human behaviour and produces intuition. Ya. Ponomariov has distinguished two types of intuition: the first one is connected with search, creativity, the other one – with use of a ready decision applicable in a new situation [4]. The second type of intuition, according to Ya. Ponomariov, is inherent in any human being.

A set of images from life experience or products of imagination may take the shape of prompts and intuitive catalysers which stimulate vivid thought. Besides, creation of positive images blocks manifestations of destructive behaviour, contributes to accumulation of sensual experience which may become the basis for impressing and formation of certain behaviour schemes, including the creative one.

The significance of accumulation of images, their further transformation into a conceptual plan (hypothesis)

and then into a strategy of solving a problem is one of the key ideas presented in V. Moliako's monograph [5]. The author distinguishes two stages in the process of forming a design conceptual plan: emerging of the initial images and concepts, and maturing of the moment when the designer decides to carry on with the search in a certain direction on the basis of his/her conceptual plan-hypothesis [5, s. 41]. In other words, image-concept is viewed as a dynamic process. The development of initial image-concept into image-idea takes place with the help of methods based on comparison, synthesis, analysis, abstraction, concretization and classification, namely they are: analogy, transference, combination, division, displacement, recombination, etc.

There are numerous cases in the world science when the essence of complicated scientific problems was presented by their authors with use of imagery and vividness. A. Sommerfeld, a German physicist, when outlining the essence of scientific problems in the preface to his monograph «*Atombau und Spektrallinien*», states: «What we hear today in the noise of spectre lines is a real music of spheres sounding in atom, consonance of integral ratios, order and harmony, ever increasing despite all the diversity» [2, s. 547]. He continues then on the quantum theory: «It is that mysterious organ with which the nature plays spectral music and whose rhythm rules the structure of atom nucleus» [2, s. 547].

And what do we have in reality with development of vivid thought?

The main type of thinking for a primary school student is visualization and imagery, both tightly connected with emotional sphere. The content of educational disciplines, methods of teaching, however, train and develop mainly the left-hemisphere ignoring at least half of the child's potential. In the majority of textbooks information is presented in a logical, consequent and abstract way. One can witness mathematization and algorithmization of material in the process of studying the humanities. The general emotional mode of presenting information has considerably dropped down; the language is getting dry; the amount of bright vivid examples reduced; rhythms – linguistic and musical – capable of intensifying emotional and involuntary memory, are used all too rarely.

This can be considered a system mistake for the more efforts it took to study in the mode of prevailing logical and semiotic thought the more efforts will be required later to overcome its limitations.

A possible way out of such a situation can be found in application of creative pedagogy. The methods of creative pedagogy include various ways of stimulating, supporting and developing creative aptitudes, vivid thinking skills, as well as of emotionally motivated faculties in human activity. Those are the methods of creative potential based on theoretical and practical knowledge about the nature of creative processes and capacities, holistic perception of creativity as a lifestyle, as well as of the outer circumstances contributing to creative activity. If classified according to the criterion of goal achievement, methods of creative pedagogy can be divided into two groups:

- those aimed at solving a particular problem (creative solution of a problem);
- those aimed at the development of creativity in a particular personality (student) or group of students due to stimulating the appropriate processes and overcoming

present obstacles to creativity. In this case, unlike the previous one, they will not be a «means» but the aim of influence.

Among the methods of creative pedagogy are:

- methods of stimulating cognitive interest and problem-oriented thinking; methods of applying divergent thinking;
- methods of applying analogy, association and metaphor; methods based on the use of sensual (objective) experience.

If one establishes a goal of fostering creative personalities (s)he should organize the studying activity of a pupil (student) in such a way as to develop the functions of his/her right hemisphere. The teacher should be able to recognize non-verbal signals of his students, be aware of his/her own thought style and the thought style of his students, differentiate his/her interactions with them according to this awareness.

When dealing with right-hemisphere students the teacher should pivot on the social significance of that or another type of activity since they are driven by a strong need for self-realization. The motives inciting to study in this case are connected with formation of personality, with aspiration for study, with desire to understand human relationships, to comprehend one's situation in the world. They are typically oriented to receive high evaluation and praise. Right-hemisphere students are hugely interested in the esthetic side of subjects. To form the motivation for studying activity in case with left-hemisphere students one should pivot on cognitive motives. They like the very process of acquiring information and are characterized by a high need for constant intellectual activity. Social motive in this case lies in the opportunity to continue studies. Being a scholar is considered as a means of developing one's thinking capacities. There is a clear manifestation of need for intellectual and volitional self-perfection. Right-hemisphere students are in a state of on-going stress if their teacher is demanding from them to work with out-of-context material. On the contrary, they achieve success at the classes when the same tasks are given within contextual framework (algebraic plotting used for calculating everyday expenses, new words introduced in the process of reading or telling, chemical balance equation derived from lab experiments). Left-hemisphere students seldom have big problems at classes since many things take place out of context. However, they would struggle with a written composition or certain types of individual work. They may not notice the whole in its parts or lack the capacities to deduce rules. Besides, a left-hemisphere teacher is better at evaluating the children of his/her type while right- and equal-hemisphere teachers give positive evaluation to the children of their type. In classes with prevailing number of right-hemisphere children, beyond the impact of teacher's teaching advantages, any kind of activity turns into a synthetic one. In this case left-hemisphere children appear to be in a risk group.

Based on the concept of synthetic intuitionism [1] let us formulate a set of generalizing theses indicating the necessity of forming during the teaching process a system of conceptualized images in students' minds:

- teacher works with students in order to accumulate different range images of the objective world, forms their sensual base and in this sensual objectivity dis-

- covers them for the students; student has a discourse not with the other person but with reality, or, to be more precise, with images of this reality; the events, objects, words, figures etc. perceived by a person are transformed not into a limited circle of knowledge expressed by a limited vocabulary but into a store of images provided to that person by environment;
- thinking real images enables a person to analyze the most complicated facets of reality, comprehend them, manifest one's attitude to them, juxtapose them against one's moral and ethical ideals; what happens can be rendered as «grasping» the so called «leading thread», something that enables synthesis of poetic type, gives the wealth of content, vulnerability and openness of the language, reference to symbolic exaltations, etc.;
 - synthetic intuitionism reaches objectification of its discourse into a certain appearance. The mechanism of vivid memory is quite specific. Imagination preserves an image translatable into any language. It does so by using a certain semiotic system. This bears a necessity to translate the sensual and the intuitive into a verbal expression called for developing one's linguistic and intellectual unconstraint.

Thus, application of creative pedagogy in educational process contributes to the development of vivid thought and search activity. Creative process as a ramified system of possible actions requires production of new images which later get transformed into notions, judgments, strategies and tactics for solving creative tasks. Images, various visual objects and their combinations serve pupils (students) as certain patterns for comparison, determine individual peculiarities of perception and understanding, impact the structure of their thinking. Creatively gifted pupils (students) can operate spatial images and, therefore, are better at digesting information.

References:

1. Горальський А. Теорія творчості. Львів: Каменяр, Warszawa: Universitas rediviva, 2002. 144 с.

2. Капица С.П. Жизнь науки. Антология вступлений к классике естествознания. Москва: Наука, 1973. 600 с.
3. Леонтьев А.Н. Деятельность и сознание. *Вопросы философии*. 1972. № 12. С. 132–140.
4. Пономарев Я.А. Психология творчества. Москва: Наука, 1976. 303 с.
5. Психологічне дослідження творчого потенціалу особистості : монографія / наук. кер. В.О. Моляко. Київ: Педагогічна думка, 2008. 208 с.

Роксолана Швай

Національний університет «Львівська політехніка»

РОЗВИТОК ОБРАЗНОГО МИСЛЕННЯ ЯК КРОК ДО ТВОРЧОСТІ

Творчий процес як розгалужена система можливих дій вимагає створення нових образів, які в подальшому трансформуються у поняття, судження, стратегії і тактики розв'язування творчих завдань. Образ, що виступає у ролі імпресингу, може стимулювати творчість як дериват захопленості, заломлений через мотиваційну структуру. Образ є механізмом запуску захопленості і основою для формування імпресингу. Образ є результатом уяви, що дозволяє розвивати праву півкулю, запускати багатоконтекстність мислення. Головною функцією уяви є її участь у творчому процесі. Правопівкульна активність, установлення багатозначних зв'язків, образне мислення сприяє відновленню пошукової активності. У цьому розумінні образне мислення стає одним із найвагоміших критеріїв творчої діяльності. Образ є результатом накопичення чуттєвого (предметного) життєвого досвіду, в результаті якого створюється база даних для прийняття стандартних дій та рішень. Образи попередніх дій стають еталоном не лише для стандартного рішення, але й для прийняття нестандартного рішення в майбутньому. Застосування педагогіки творчості в освітньому процесі сприяє розвитку образного мислення, пошуковій активності.

Ключові слова: творчість, образ, імпресинг, методи педагогіки творчості.

Отримано: 18.10.2021

УДК 614.84:331.45

DOI: 10.32626/2307-4507.2021-27.47-52

В. В. Шевченко

Національний педагогічний університет імені М. П. Драгоманова
e-mail: ist-volodymyr@ukr.net; ORCID: 0000-0002-8905-5483

ТЕОРЕТИЧНІ ЗАСАДИ ОРГАНІЗАЦІЇ ПОЖЕЖНОЇ БЕЗПЕКИ В КОНТЕКСТІ ЗАБЕЗПЕЧЕННЯ СИСТЕМИ ОХОРОНИ ПРАЦІ

У нових соціально-економічних умовах роль держави суттєво змінюється. Закон України «Про охорону праці» вперше чітко визначив політику держави у сфері захисту інтересів як найманих працівників, так і роботодавців у трудовому процесі, законодавчо закріпив право працівника на безпечну працю. Згідно з цим Законом роль держави та її інститутів в охороні праці не зводиться до створення правових норм і адміністративного нагляду. Держава розробляє й реалізує заходи, спрямовані на створення цілісної системи державного управління охороною праці, організує контроль за виконанням відповідних законодавчих і нормативних актів, координує діяльність центральних та місцевих органів виконавчої влади в цій сфері, ініціює розробку конкретних програм у галузі безпеки та гігієни праці, стежить за їх виконанням.

Ключові слова: Охорона праці, ЗВО, інформаційна технологія забезпечення безпечного виробництва (ІТ ОБП), безпека праці, ІКТ виробництво, пожежа, СПЗ.

Одним із найважливіших напрямків діяльності держави як об'єкту управління є забезпечення охорони життя і здоров'я своїх громадян, національних багатств та оточуючого середовища. Стаття 5 Конституції України говорить, що «Охорона здоров'я – загальний обов'язок суспільства та держави» [10]. Розглядаючи чинники, що завдають значної шкоди як здоров'ю людей так і колосальних матеріальних збит-

ків, ми бачимо, що це не лише впливає на здоров'я людей, але й на економіку країни. Згідно з дослідженнями, зробленими в Україні, кожен рік втрачається близько 10% ВВП країни через захворювання та травми, пов'язані з нещасними випадками на роботі та в побуті. Це свідчить про те, що охорона здоров'я є одним з найважливіших аспектів розвитку країни.