спорів, має детальну інформацію про запропоновані ситуації та варіанти їх вирішення в реальності, що має неабияке значення для майбутніх правозастосовувачів юридичної сфери. Важливим напрямом у розвитку юридичної освіти в Україні на етапі її входження до європейського освітнього простору є реформування самого навчального процесу, що буде стимулювати індивідуальну навчальну активність студентів, краще володіння юридичною технікою, технікою аргументації, здатність вирішувати окремі юридичні проблеми, казуси, знаходити альтернативні рішення тощо. За результатами апробації внесено конкретні пропозиції щодо модернізації навчального процесу у сферу професійної підготовки фахівців-юристів шляхом запровадження нових форм і методів активного навчання з широким використанням практичної складової, направленої на формування професійних компетенцій та відповідного становлення професійної компетентності.

*Ключові слова*: юридична освіта, реформування, навчальний процес, методи активного навчання, професійна компетентність.

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Oleksii Lystopad, Doctor of Pedagogy, associate professor, Iryna Mardarova,

PhD (Candidate of Pedagogical Sciences), senior lecturer, Department of Preschool Pedagogy, South Ukrainian National Pedagogical University named after K. D. Ushynsky, 26, Staroportofrankivska Str., Odesa, Ukraina

Tomash Kuk,

Vice-president of University College of Social Science, 7, 42-200, Nadrzeczna Str., Czestochova, Poland

# FORMING STUDENTS' MOTIVATION FOR CREATIVITY BY MEANS OF EDWARD DE BONO'S "SIX THINKING HATS" TECHNIQUE

The paper aims to reveal the peculiarities of forming future specialists' motivation for creativity with the help of Edward de Bono's "Six Thinking Hats" technique during the lessons of "New Informational Technologies in Education" discipline. 32 students took part in the experiment which was aimed at examining the peculiarities of the formation of students' motivation for creativity by means of A. Rean's "Motivation for Success and Fear of Failure Inventory". The initial results have shown that most of the students were characterized by self-distrust and their motivation for success was low. After implementing the "Six Thinking Hats" technique into the educational process the motivation to succeed increased in most respondents, which means that it is an efficient tool for the development of students' skills of coping with problems and as a result, increasing motivation for creativity.

Keywords: creativity, motivation to creative work, students, six thinking hats, Edward de Bono, higher education.

## Introduction

Modern sociocultural conditions of Ukraine's development provide the necessity of modernizing the system of professional training of future preschool teachers, which should be based on the wide spectrum of technologies encouraging them to creative skills development. In pedagogy, the issue of forming students' motivation for creative work is considered to be relevant. Besides, it has social nature, which is why it is also investigated by philosophers, sociologists, pedagogues and psychologists.

The scientific literature review [according to 4; 5; 6] has shown that the formation of students' motivation to use creative approach to future work is more difficult to

realize compared to just gaining knowledge. Motivation is traditionally considered as a complex of psychological reasons defining person's behavior, his/her activity. Motivation processes are the basis of human activity and psychic functioning, they define a type of behavior, its trajectory. In scientific literature, motivation is defined as close and distant: "the first one is determined by physiological needs and situational urgency, and the second one — by the need which becomes an activity itself, which gives joy and pleasure. Inner motivation is a form of self-actualization" [7, p. 74]. Ye. Ilin emphasized that human desire for self-fulfillment is a leading encouraging motive

of creativity [6, p. 19]. The efficiency of motivation is associated with a certain situation.

Motivation for creative professional activities provides its focus on the creative approach to its different aspects, orients cognitive and communication processes towards creativity at finding non-standard decisions in work, encourages for continuous self-development of creative skills in terms of the occupation. Motivation for creative professional activities is directly associated with recognizing the significance of creativity as occupation-related quality, understanding the importance of one's own and other people's creativity. The understanding of its importance by students contributes to the formation of their motivation to use creative approaches to their future work.

The formation is regarded as a process of changes in interaction with reality, the emergence of psychological formations in the structure of future professional's motivation sphere. In terms of the formation of motivation for creativity it should be noted that the process itself should be transformed into the creative procedure. In the educational process one should shape creative spirit basing on students' creative skills. That is why in the process of the formation of students' motivation for creativity in their future work the peculiarities of their professional training should be taken into account.

According to the regulations of modern motivation theories (T. Hordieieva [4], S. Zaniuk [5], Ilin [6]) the process of forming students' motivation for creativity in their future work is accelerated with the help of the lessons where creative and competitive exercises are used, as they activate their intellectual and creative potential, providing student-centered approach, and the development of research skills. At the technological level, it implies encouraging students to solve occupation-related tasks of heuristic nature. Besides, it should be emphasized that a university teacher plays an extremely important role in the process of the formation of students' motivation for creativity in their future work. He/she should not provide students with ready answers and encourage them for independent search, team discussions, crating favorable friendly conditions, using non-trivial situations, considering everyone's motives, interests, and desires.

Modern system of professional training in terms of higher education actively uses creative ways of educational process organization, one of which is "Six Thinking Hats" technique by Edward de Bono. His great contribution is that he has created exercised for the development of creative thinking, which help to create atmosphere of joy, trust, mutual respect and understanding at classes [2].

The "Six Thinking Hats" technique is a system describing the tool for team discussion and individual thinking using six colored hats. The main approaches to its organization are the use of different mental processes (analysis, synthesis, comparison, generalization, classification, etc.), sense-creativity, freedom of choice, self-realization, self-actualization, reflection.

Its main characteristic is interaction of all educational process participants aimed at efficient creative activities. The technique contributes to the formation of nonstandard decision-making skills, helps to analyze and assess one's own acts and level of competence. One of its advantages is approximation of the educational process to real practical activity of future professionals. This strategy contributes to the orientation at success achievement in the process of realizing students' personal creative skills.

The paper **aims to** investigate the peculiarities of forming students' motivation to use creative approach to their future work.

#### **Research Methods**

The diagnostics of the peculiarities of the formation of future preschool teachers' motivation for creativity in their future work was carried out at the Faculty of Preschool Pedagogy and Psychology of South Ukrainian National Pedagogical University named after K. D. Ushynsky. The experiment involved 32 students. The diagnostics was performed before and after conducting lessons in "New Information Technologies in Preschool Education" discipline using Edward de Bono's "Six Thinking Hats" technique.

In order to cope with a task future preschool teachers had to try six hats on (white, black, blue, yellow, red, and green), every of which reflected the type of attitude towards life. If a student put on a white hat (independently constructed in advance), his/her attitude to the issue had to be neutral, he/she had to rely on analytical thinking only, avoid emotions, and use only verified data.

The red hat was a symbol of subjectivity and emotional thinking. A student wearing it had to express his/her thoughts manifesting various feelings and emotions. This person acted as a critic, searching for only negative aspects of the situation, accusing other participants of falseness.

A student wearing a yellow hat should think positively, search for positive sides of the problematic situation, help the game participants with positive discussion of their ideas.

The green hat is a symbol of associative, creative thinking. A student with it on his/her head had to avoid trivial ideas, his/her goal was to generate creative ways out of a crisis situation and collect all alternative and even fantastic decisions.

The blue hat on one's head expresses order and structure. The main goal of the participant with it on his/her head is to consider and structure all the suggested ideas [3].

Concerning the topics under discussion, they were relevant and clear for students: "The Development of Didactic, Aesthetic, Educational Assessment Criteria of the Efficiency of Electronic Learning Materials for Preschoolers", "The Development of the Algorithm of Creating Electronic Learning Materials for Preschoolers", etc. In the process of preparing for the lessons the students had an opportunity to have a look at the available websites, for instance, the website for parents and children

"Levko", a website dedicated to preschoolers and early development of a child – "For our Children", as well as websites of kindergartens and electronic libraries, etc.

The students according to the roles not only discussed the problems arising in the process of the development of an algorithm of creating electronic materials for preschoolers but also invented the ways out of problematic situations. For example, the students have developed a program of a study group "School of Professor Fortran" which was aimed at the implementation of tasks of a basic component of preschool education (variable part "Computer Literacy") and programs of preschoolers' development "Me in the World".

The experiment aimed at investigating the peculiarities of the formation of students' motivation for creativity was carried out by means of using A. Rean's "Motivation for Success and Fear of Failure Inventory". The respondents had to give positive or negative answers to 20 statements of the inventory. At this, every reply was evaluated in 1 score. "Motivation to failure" or "Fear of failure" were ranged from 1 to 7 scores, uncertain motivation pole was ranged from 8 to 13, and motivation to succeed was ranged from 14 to 20 scores.

In order to check the significance of the difference between the levels of the maturity of the respondents' motivation for creativity before and after the implementation of the lessons using the suggested technique into the educational process we used Pearson's chi-squared test.

There are two main hypotheses for revealing the significance of the difference (H0 and H1). H0 implies that the distribution of the levels of the maturity of the respondents' motivation for creativity after carrying out the experiment by means of implementing lessons using "Six Thinking Hats" method does not have any significant difference. And H1 implies that the levels of the maturity of the respondents' motivation for creativity after carrying out the experiments my means of implementing lessons using "Six Thinking Hats" method are significantly different.

## **Research Results**

The technique was positively perceived and assessed by the students and besides, it created favorable atmosphere for creative interaction between a teacher and students which in turn helped not only to absorb necessary knowledge in theory and practice of using electronic learning materials for teaching preschoolers but also ex-

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press uniqueness and flexibility of thinking, form skills of addressing challenges creatively. The putting on of every of the six hats made students apply for their own life experience, consider a problem from different points of view, recollect and apply behavior patterns of other people which are peculiar for the hat fallen to share.

The research outcomes show that before the experiment (before implementing the technique) 29.7% of the respondents had fear of failure, and 9.8% hoped for success. The uncertain motivation pole was peculiar for most of the students -60.5%. We believe that the students' self-distrust is a result of lack of skills of mastering new learning material efficiently using creative methods.

After conducting lessons in the subject "New Information Technologies in Preschool Education" using the suggested technique fear to fail was found only in 12.2% of the respondents, uncertain motivation pole – in 44.9%, and motivation to succeed – in 42.9% of the students.

The calculation results using Pearson's chi-squared test performed by means of Exel and "Statistica" statistical analysis program have revealed that  $\chi 2=30.406$  which exceeds the expected value  $\chi 20.05$  (5.991), and  $\chi 20.01$  (9.21), v=2. It means that H0 is rejected and H1 is accepted. Thus, the distribution of the levels of the maturity of future preschool teachers' motivation for creativity before and after carrying out the experiment is significant.

## Conclusion

Thus, we can conclude that Edward de Bono's "Six Thinking Hats" technique contributes to the formation of students' motivation for creativity in their future work. To make a student solve a problem arisen efficiently he/she should not only activate knowledge of the ways of creative activity but also transform it, perceiving oneself as the educational process subject which helped him/her to cope with the challenge.

One more advantage of this technique is that every student regardless of his/her temper could consider a problem from different points of view, independently generate new ideas. It provided an opportunity to develop sensitivity to the new and unknown things, tolerance to uncertain situations, searching skills. Most of the students who have taken part in our experiment succeeded in making hypotheses and improved the ability to find non-standard creative solutions to the challenges, express unique ideas, etc.

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Олексій Анатолійович Листопад, доктор педагогічних наук, доцент, Ірина Костянтинівна Мардарова, кандидат педагогічних наук, старший викладач, кафедра дошкільної педагогіки, Південноукраїнський національний педагогічний університет імені К.Д. Ушинського, вул. Старопортофранківська, 26, м. Одеса, Україна,

Томаш Кук,

віце-президент Вищої Лінгвістичної Школи, вул. Надрцежна, 7, 42-200, м. Ченстохова, Польща

## ФОРМУВАННЯ В МАЙБУТНІХ ФАХІВЦІВ МОТИВАЦІЇ ДО ТВОРЧОЇ ПРОФЕСІЙНОЇ ДІЯЛЬ-НОСТІ ЗА МЕТОДИКОЮ «ШІСТЬ КАПЕЛЮХІВ МИСЛЕННЯ» ЕДВАРДА ДЕ БОНО

Розкрито особливості формування в майбутніх фахівців мотивації до творчої професійної діяльності за методикою «Шість капелюхів мислення» Едварда де Боно на заняттях з навчальної дисципліни «Нові інформаційні технології в дошкільній освіті». Доведено, що мотивація до творчої професійної діяльності безпосередньо пов'язана з визнанням цінності творчості як важливої особистісної та професійно-значущої якості, усвідомленням значущості особистої творчості та творчості інших людей. Встановлено, що ефективність процесу формування в майбутніх фахівців мотивації до творчої професійної діяльності залежить від особливостей організації освітнього процесу у виші, тому навчальну діяльність студентів на занятті необхідно перетворити на творчий процес, варто спрямовувати студенів на творчий пошук, спираючись на розвиток їхніх творчих навичок. Запропоновано діагностувальний інструментарій та представлено результати діагностування особливостей формування в майбутніх фахівців мотивації до творчої професійної діяльності за допомогою методики А. Реана «Мотивація успіху та побоювання невдач». Отримані в результаті тестування дані свідчать про те, що до проведення занять з навчальної дисципліни «Нові інформаційні технології в дошкільній освіті» з використанням методики «Шість капелюхів мислення» Едварда де Боно невизначений мотиваційний полюс був властивий переважній більшості опитаних. У статті доведено, що методика «Шість капелюхів мислення» Едварда де Боно сприяє формуванню в майбутніх фахівців мотивації до творчої професійної діяльності та встановлено, що вона надає можливість кожному студенту, незалежно від свого характеру, розвивати здатність знаходити нестандартні рішення, чітко виділяти головні ідеї й висловлювати оригінальні думки, розвиває чутливість до нового та незвичного, толерантність до невизначених ситуацій. Після проведення занять з навчальної дисципліни «Нові інформаційні технології в дошкільній освіті» - «побоювання невдачі» було зафіксовано лише в 12,2% опитаних, невизначений мотиваційний полюс – у 44,9% студентів, «сподіваються на успіх» – у 42,9% майбутніх ви-

*Ключові слова:* творчість, мотивація до творчої професійної діяльності, студенти, Едвард де Боно, креативність, вища освіта.

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