FORMATION OF STUDENTS EMOTIONAL INTELLIGENCE AS A FACTOR OF THEIR ACADEMIC DEVELOPMENT

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The relevance of the paper is determined by the mission of education - the formation of an occupationally and socially successful graduate of the university. The purpose of the paper is to give an evolutionary analysis of the phenomenon of emotional intelligence as a factor of students' academic development in relation to the essential characteristics of communicative interaction. Authors comprehensively consider emotional intelligence, presenting it as a combination of components: emotional awareness, emotion management, emotional self-motivation, empathy, recognition of other people's emotions in the process of communicative interaction. The authors have identified and implemented the technologies for the formation of emotional intelligence as a whole dynamic formation that provides an optimistic awareness, understanding and regulation of one's own emotions and emotions of others, and their effectiveness is proved on the example of student youth. The paper is intended for researchers, educators, and psychologists dealing with the problems of the formation of personal qualities, including the emotional intelligence of students.

Keywords: education, emotional intelligence, academic development, art technologies.

INTRODUCTION

Recently, interest in studying emotional intelligence and its impact on academic success has been growing steadily. Among the many factors contributing to the fact that students do not complete their education and experience learning difficulties, one can distinguish such as experiencing negative emotions during the learning process, straining relations with teachers and peers, and difficulties in adapting to new conditions. The National Center for Educational Statistics of the USA cites such data: only 73% of pupils in the upper grades of the school finish it within four years; of those who enter college, only 55% get a bachelor's degree, more than 18% do not finish their higher education (Titsworth, Quinlan & Mazer, 2010).

Emotional competencies are closely related to the academic and social development of students. It is easier to learn and effectively build interpersonal

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relationships for students who have emotional competences. Moreover, students who have a higher coefficient of emotional development, achieve better results in training. The problems that arise in the process of social interaction are resolved more quickly among people who are able to control their own emotions, analyze the feelings of other people, who are able to empathize and provide support. Such people often have a higher level of self-awareness and are able to generate innovative ideas. Therefore, the development of emotional intelligence can rightfully be considered one of the key factors contributing to the successful learning of each person in particular and the full development of the whole society as a whole.

The phenomenon of emotional intelligence, its structure and development background was considered by foreign scientists such P. Salovey (1990), D. Golman (1995), R. Bar-On (2006), J.D. Mayer (2008) V.C. Petersen (2010).

Studying the emotional intelligence, foreign researchers offered different definitions for this phenomenon. The term was first used in 1990 (Salovey, 1990). Its authors, Salovey P. and Mayer J. (1999) view emotional intelligence as a person's ability to control their own feelings and feelings of other people, recognize them and use this information to control their own thinking and actions. Bechar A. et al. consider emotional intelligence as a set of emotional abilities that form a form of intelligence that has differences from cognitive intelligence or from IQ (Golman, 2008).

Golman D. in his work "Emotional intelligence: Why it can mean more than IQ" writes that for a successful and happy future person, a high coefficient of emotional intelligence may be even more important than the mental one. Emotional intelligence is no less important component in the development of the individual in society than the level of mental development (Golman, 1995). Vanessa S. Petersen, after reviewing the research on the influence of emotional intelligence on adult education, points to the existence of a positive relationship between emotional intelligence and the academic achievements of man (Petersen, 2010).

The study of emotional intelligence in modern Russian science is carried out by scientists: I.N. Andreeva (2009), E.S. Ivanova (2013), I.N. Manoylova (2008), M.I. Schneider (2016). According to I.N. Andreeva, emotional intelligence is defined as the ability to understand the relationship of personality, represented in emotions (Ivanova, 2013). E.S. Ivanova in the structure of emotional intelligence distinguishes emotional, cognitive and behavioral components (Ivanova, 2013).

An analysis of the research of foreign and domestic scientists on the problem of emotional intelligence allowed: to reveal that they all point to the existence of a positive relationship between emotional intelligence and the academic achievements of man; to define emotional intelligence as an integral dynamic formation that provides an optimistic awareness, understanding and regulation of one's own emotions and emotions of others, affecting the success of socio-cultural interaction.

Unlike the coefficient of mental development, which is considered permanent and is not subject to changes during life, the coefficient of emotional intelligence may increase with time (Bar-On, 2006; Goleman, 2008.). Emotional intelligence and cognitive intelligence contribute equally to the overall development of man and further influence the success of man in life (Lyusin, 2004). Students, whose level of development of emotional intelligence varies from average to above average, respectively, receive higher marks in the learning process. Consequently, the formation of emotional intelligence in the educational process is an extremely important factor for the successful learning of students (Hargreaves, 2012).

MATERIALS AND METHODS

Model of emotional intelligence

Salovey P. and Gruel D. developed the author's model of the constituent parts of emotional intelligence, which include four different abilities or skills: (a) perception of emotions; (b) use of emotions; (c) understanding emotions; and (d) managing emotions (Salovey & Gruel, 2005).

The first component of this model - the ability to feel emotions - involves the ability to identify and recognize emotions expressed by some images, faces, voices, gestures. The second component - skillful use of emotions - contributes to the emergence and development of various cognitive abilities. An emotionally competent person will be able to use profitably his mood for the most successful accomplishment of the task facing him. The third component of emotional intelligence includes the ability to understand the language of emotions and distinguish between different shades of feelings. The fourth component of the model of emotional intelligence consists of the ability to control one's emotions in the first place, as well as the emotions of other people.

Bar-On R. asserts that there are five components of emotional intelligence: (a) the ability to identify, understand and express emotions and feelings; (b) the ability to understand how other people feel and treat them accordingly; (c) the ability to manage emotions and control them; (d) the ability to manage, modify, adapt and solve problems of a personal and interpersonal nature; (e) the ability to make a positive impression and have self-motivation (Bar-On, 2006).

During the development of the author's model, we relied on the point of view of D.V. Lyucin (2004), who stresses that it is wrong to treat emotional intelligence as a purely cognitive ability by analogy with spatial or verbal intelligence. It is reasonable to assume that the ability to understand and manage emotions is very closely related to the general orientation of the individual to the emotional sphere, i.e. with an interest in the inner world of people (including their own), a tendency to psychological analysis of behavior, with values attributed to emotional experiences. Therefore, emotional intelligence can be represented as a construct

having a dual nature and associated, on the one hand, with cognitive abilities, and on the other hand - with personal characteristics.

In connection with this theoretical postulate, our model of emotional intelligence includes four components, oriented not only to the cognitive component, but also to personal characteristics:

– cognitive - the ability to understand emotional information; conscious perception of the language of emotions, emotional awareness;

– emotional-value - the ability to understand the language of emotions, the presence of positive emotions in the emotional-value orientations of the individual: values-goals, values-qualities, values-attitudes, empathy;

– communicative - predicting the emotional climate of communicative situations; creative level of emotional and communicative control, speech artistry, recognition of emotions of other people in the process of communicative interaction;

– emotional-activity-related - the ability to use emotions to achieve the goal; emotional self-motivation; control one's emotions.

Methods, base and stages of research

During the research, the following methods were used: theoretical (analysis, synthesis, concretization, generalization, analogy, and modeling); diagnostic (questioning, interviewing, testing, method of tasks and tasks); empirical (study of the experience of the work of educational organizations, normative and educational-methodical documentation, and pedagogical observation); experimental (ascertaining, forming experiments).

Experimental base of the research was the State Autonomous Educational Institution of Secondary Professional Education of the Republic of Tatarstan "Kazan Choreographic School", the Kazan State Conservatory (Academy) named after N.G. Zhiganov.

The study of the problem was carried out in two stages: at the first stage - a theoretical analysis of the existing methodological approaches in the philosophical, psychological and pedagogical scientific literature, dissertation work on the problem, as well as the theory and methodic of psychological and pedagogical research; at the second stage technologies were developed for the formation of emotional intelligence; experimental work was carried out; the conclusions obtained in the course of the experimental work were analyzed, tested and refined.

RESULTS

In the process of forming emotional intelligence "a special technology is necessary that ensures the integrative wholeness of the emotional and rational-logical processes of cognition. This is facilitated by art technology, the main features of

which are deep individualization, creative character of the activity and the desire to penetrate into the nature of personal emotional expressiveness. These technologies form the student's motivational and valuable attitude to the content of education; emotional perception of the material contributes to the preservation of sustained attention and interest; there is a feeling of relaxedness, freedom, disposition towards the interlocutor; the ability to translate knowledge into a personal meaning, a positive creative state of health and inspiration develops.

The basic starting postulates of art-technologies are:

1) the integrity of the individual, which includes: the formation of life values, intercultural and communicative competency, creative and personal self-realization, internal freedom and responsibility;

2) art, as a specific form of culture, determines not only artistic laws and individual psychological features of creativity, but also conforms to the socio-cultural requirements of the era as a guide for building contextual connections of the individual with the society and artistic culture in general.

The content of art-technologies is directed to:

disclosure of universal developmental, cognitive and information possibilities of art; ways of their application for providing training and educational processes;

creation and implementation of socio-cultural adaptation programs for the individual, contributing to the full emotional and intellectual development of students;

assistance to pedagogical workers in the formation of students' principles of mutual assistance, tolerance, charity, responsibility and self-confidence, the ability actively to interact without infringing the rights and freedoms of another person;

training positive strategies for adapting of the individual to culture and society.

the development of art technologies is based on the principles: 1) the priority of human values, life and health; 2) attitudes towards education as an emotional and intellectual process aimed at the dialogue and cooperation of its participants.

Functions of art technologies

– culture-forming orients on culture-forming discourses in the dialogue of cultures;

– artistic and communicative is manifested in building a polylogue and dialogue in communicative interaction, speech artistry;

– aesthetic actualizes the aesthetic position and self-actualization of the emotional-imaginative creative attitude; forms the artistic and aesthetic taste of students;

– creative-hermeneutical focuses on purposeful activity to create intellectual creative meaning in professional activity;

- interpretational provides an emotional and logical interpretation of the array of information coming in the communication process;
- protective - focuses on humane treatment of works of art, native language and language of culture.

Let us consider the implementation of the described theoretical postulates of art technologies in practical application in the process of forming the communicative component of emotional intelligence in the subject-subject interaction of the teacher and students at the training session. It is advisable to use art-technology of communication according to the laws of the theatrical action. The effective application of this technology is carried out on the basis of the following functions:

1. *Motivational function* – is implemented during preparation for the lesson and during the lesson; at this time an increased cognitive motivation of the teaching is established, which enables to connect actual knowledge with their emotional perception.

2. *Mobilization function* - is realized at the stage of anticipation of the forthcoming communication, when there is a release from tension, a mood for a positive emotional dominant.

3. *Attractive function.* Attractive self-presentation defines expressive personal manifestations of the teacher and students, communicative spirituality.

4. *Function of tolerance.* Emotional empathy facilitates interaction between the teacher and the student, promotes the manifestation of tolerance for someone else's culture, opinion, belief.

5. *Stimulation function.* It implies the stimulation of the creative well-being and creative activity of the teacher and students in their unity.

6. *Emotional-energy speech function* is revealed in the unity of the manner of behavior and the pronunciation of speech. The expressive energy of speech is based on an emotional bio-field that ensures the expressiveness of the arguments used.

7. *Synthetic function.* If the activities of the teacher are characterized by the richness of personal manifestations, eccentricity, attitudes toward students, then the emotional and creative communicative interaction and the establishment of an atmosphere of co-creation, emotional and logical co-reflection are achieved.

The effectiveness of the formation of the communication component of emotional intelligence is provided by a complex of *communication effects*: the effect of the visual image, the first phrases, quantum information ejection, imagination, and discussion.

The effect of the visual image is created on the basis of the impression of the appearance of the speaker. Attractive appearance, elegant manner of communication, benevolent open look - all this has a positive emotional impact.

The effect of the first phrases is designed to fix or correct the initial impression. The main criterion for the effect of the first phrases is the interesting information they contain.

The effect of quantum information ejection is one of the effective rhetoric techniques aimed at maintaining the attention of the audience. This effect is based on a well-thought-out distribution of emotional thoughts and arguments throughout the speech field.

The effect of the discussion. The purpose of this effect is to pose a problem interesting for students, to "embed" them in an exchange of views on it and skillfully conduct performances. With the help of this effect, the teacher manages to create two images: the image of cooperation and the image of the interview.

Imagination effect. Activation of students' intellectual activity on the basis of an emotional challenge to the imagination in the form of conjecture, guesswork, fantasy, and dreams.

Checking the effectiveness of the use of art technology in the process of forming emotional intelligence was carried out in a number of educational organizations of the profile of culture and art in Kazan (Kiseleva, 2006; Mukhametzyanova, 2014; Koloshina & Trus, 2010). Diagnosis of components of emotional intelligence: emotional awareness, emotion management, emotional self-motivation, empathy, recognition of other people's emotions was carried out on the basis of N. Hall's technique "Emotional Intelligence", the questionnaire consists of 30 items distributed according to the components of our emotional intelligence model: emotional awareness (cognitive component); management of one's emotions (emotional-activity-related component); emotional self-motivation (emotional-activity-related component); empathy (emotional-valuable component); recognition of the emotions of other people in the process of communicative interaction (communicative component). Each component was evaluated on a 6-point scale, then, for the experimental and control groups, mean scores were obtained.

The methodic is designed to identify the ability to understand the relationship of personality, represented in emotions, and to manage the emotional sphere through decision-making (see Table 1).

In the course of the experiment, the following positive dynamics of the formation of emotional intelligence of students with the use of art technologies was revealed: *emotional awareness* (cognitive component) increased by 14 in the experimental group; 6 in the control group; 13 in the experimental group, 4 in the control group increased the level of *management of their emotions,* 10 of the students in the experimental group and 3 of the students in the control group increased their level of *emotional self-motivation (emotional activity-related component;* 13 of the students in the experimental group and 4 of the students of the control group reached a higher level of *empathy (emotional-valuable component),* 13 of the students in the experimental group and 4 of the control group students began to

TABLE 1: RESULTS OF EXPERIMENTAL WORK ON THE FORMATION OF
EMOTIONAL INTELLIGENCE OF STUDENTS

Scales	Points, average values (max 36 for each component)			
	The ascertaining stage		Intermediate stage	
	Control group	Experimental group	Control group	Experimental group
Emotionalawareness	12,21	12,54	18,15	26,07
Controlwith emotions	8,58	7,92	12,21	20,46
Emotional self-motivation	10,23	10,56	13,53	20,79
Empathy	9,57	9,24	13,2	22,11
Recognizing the emotions of other people in the process of communicative interaction	8,91	8,58	12,87	21,12

better recognize and *understand the emotional manifestations and states* of other people in the process of communicative interaction (communicative component).

Thus, the dynamics of the increase in the averaged indices of the structural components of the emotional intelligence of students in the experimental group is much higher than in the control group. The revealed positive dynamics of the formation of the structural components of emotional intelligence confirms the effectiveness of the use of art technologies.

DISCUSSIONS

The problem of choosing technologies for the formation of emotional intelligence is widely covered in modern psychological and pedagogical studies. The program for the remote development of emotional intelligence is described by E.S. Ivanova (2013). M.A. Manoylova (2008) offers acme logical exercises for the development of emotional intelligence, grouped into four groups: self-knowledge and self-management of emotions, cognition and management of the emotions of others. E.A. Khlevnaya (2012) is considering the possibilities of developing the emotional intelligence of managers with the help of a purposeful training influence. For several years, actively conducts trainings on the development of emotional intelligence the center "EQuator" in St. Petersburg (Shabanov & Aleshin, 2014).

In psychological and pedagogical sources, the main aspect is the use of art-therapeutic techniques in the process of formation of emotional intelligence (Ivanova, 2013; Masalimova, Luchinina & Ulengov, 2016; Kalimullin & Dobrotvorskaya, 2016; Kalimullin & Islamova, 2016). It should be noted that this problem is more often considered in relation to the development of emotional intelligence within the priority tasks of the development of preschool education.

At the moment, special studies on the use of art technology in the process of forming emotional intelligence of students as a factor in their academic development are practically absent. The authors suggest not only the actualization of emotional

intelligence within the framework of professional and higher education, but also the implementation of art technologies as a technological mechanism that creates conditions for creativity, control over behavior and emotions, and achieves academic success on the basis of disclosing the emotional-figurative potential of intellectual activity by means of art (Schneider, 2016).

CONCLUSION

1. The analysis of foreign and domestic scientists' research on the problem of emotional intelligence made it possible to reveal that they all point to the existence of a positive relationship between emotional intelligence and the academic achievements of a person.

2. A detailed study of the phenomenon of emotional intelligence made it possible to clarify the scientific concept of the content of its definition as an integral dynamic formation that integrates optimistic awareness, understanding and regulation of one's own emotions and surrounding emotions, ensuring the effectiveness of communicative interaction.

3. Art technologies that contribute to the effectiveness of the formation of emotional intelligence on the basis of ensuring the integrative wholeness of the emotional and rational-logical processes of cognition in the learning process are developed.

4. In the course of the pilot study, a positive dynamics of the formation of the structural components of emotional intelligence was revealed: emotional awareness, emotion management, emotional self-motivation, empathy, recognition of the emotions of other people with using art technologies in the control and experimental groups.

In the future, it is planned to enrich the types of art technologies as a synthesis of two areas of scientific knowledge (art and pedagogy) that provide the formation of emotional intelligence, the structural components of which are oriented not only to the cognitive component, but also to the personal characteristics of students, using the means of art: painting, music and singing, movement and dance, theater, literature, applied art. Further development of a criteria-evaluative tool for the effectiveness of the formation of personal characteristics of emotional intelligence is needed.

References

Andreeva, I.N. (2009). The conceptual field of the concept of "emotional intelligence". *Questions of psychology*, 4: 131-132.

Bar-On, R. (2006). *The Bar-On model of emotional-social intelligence (ESI).* Psicothema, 18: 13-25.

Goleman, D. (1995). *Emotional Intelligence: Why it can matter more than IQ.* New York: Bantam Books.

Golman, D. (2008). *Emotional intelligence.* Moscow: "Guardian"

Hargreaves, A. (2012). The emotional practice of teaching. *Teaching and Teacher Education*, 14 (8): 835-854.

Ivanova, E.S. (2013). Remote Internet simulator is the newest way to develop emotional intelligence. *Pedagogical Education in Russia*, 4: 93-94.

Kalimullin, A.M. & Dobrotvorskaya, S.G. (2016). Higher Education Marketing Strategies Based on Factors Impacting the Enrollees' Choice of a University and an Academic Program. *International Journal of Environmental and Science Education*, 11(13): 6025-6040.

Kalimullin, A.M. & Islamova, Z.I. (2016). Formation of Information-Educational Environment in the Partner Universities of University of Shanghai Cooperation Organization. *IEJME-Mathematics Education*, 11(6): 1879-1890.

Khlevnaya, E.A. (2012). *The role of emotional intelligence in the effectiveness of activities: the example of leaders.* The Author's abstract of the dissertation of the candidate of psychological sciences: 19.00.01. Moscow.

Kiseleva, M.V. (2006). *Art therapy in working with children*. St. Petersburg: Rech Publishing House.

Koloshina, T.Y., Trus, A.A. (2010). *Art-therapeutic techniques in training*. St. Petersburg: Rech Publishing House.

Lyusin, D.V. (2000). Social cognition in the era of rapid political and economic change. Moscow: Publishing house "Sense".

Lyusin, D.V. (2004). *Modern representations about emotional intelligence*. Moscow: Publishing house "Institute of psychology RAS".

Manoylova, M.A. (2008). *Emotional intelligence of the future teacher: acmeological diagnostics and development methods. Teaching-methodical manual*. Moscow: Publishing house «Poleograff press».

Masalimova, A.R., Luchinina, A.O. & Ulengov, R.A. (2016). Technological Education as a Means of Developing Students' Health Culture. *International Journal of Environmental and Science Education,* 11(5): 623-632.

Mayer, J.D., Roberts, R.D., Barsade S.G. (2008). Abilities: Emotional Intelligence. *The Annual Review of Psychology*, 59: 507-36;

Mukhametzyanova, L.Y. (2014). *Art pedagogy. Teaching-methodical manual for vocational education institutions*. Kazan: Publishing House "Danis".

Petersen, V.C. (2010). *The relationship between emotional intelligence and middle school students with learning disabilities*. Fairleigh Dickinson University. Preview.

Salovey, P. (1990). Emotional intelligence. Imagination. *Cognition and Personality*, 9: 185-211.

Salovey, P., Gruel, D. (2005). The Science of Emotional Intelligence. *Current Directions in Psychological Science*, 14 (6): 281-285.

Schneider, M.I. (2016). Empathy as a form of reflection of another person. *Humanization of education*, 2: 60-61.

Shabanov, S., Aleshin, A. (2014). *Emotional intellect. Russian practice*. Publishing house: "Mann, Ivanov and Ferber".

Titsworth, S., Quinlan, M.M., Mazer, J.P. (2010). Emotion in Teaching and Learning: Development and Validation of the Classroom Emotions Scale. *Communication Education*, 59 (4): 431-452.