

## Some Aspects of the Students-Future Teachers' Personal Development in the Conditions of Civil Society Formation

Arman S. Akhmetov<sup>a</sup>, Dmitriy P. Muchkin<sup>a</sup> and Elnar Sh. Utyubayev<sup>a</sup>

<sup>a</sup>Pavlodar State Pedagogical Institute, KAZAKHSTAN.

### ABSTRACT

The relevance of the research problem is caused by necessity of a new understanding of the goals and values of modern education, key issues of which are a personality and a civil development. Therefore, the purpose of the study is to examine the detected discrepancy between the need for acquisition by teachers of the skills of critical thinking and the lack of their adequate training for the attainment of this goal at pedagogical universities of the Republic of Kazakhstan. The authors have taken as a basis the notion of emotional intelligence, criteria for assessing the level of its formation and areas of its application, proposed by P. Salovey. Using the methods of pedagogical literature analysis and generalization of teaching experience we have concluded that the knowledge of formal logic and the skill of identifying the validity of assumptions on which ratiocination is built are essential but not sufficient preconditions for thinking successfully. The conclusions may constitute the basis for developing a syllabus of a relevant subject at a university level. The submissions can be regarded as starting material in researching the topic of the development of personality of future teachers under conditions of forming civil society.

### KEYWORDS

Civil society; cognition processes; student's knowledge formation; professional development of students-future teachers; emotional intelligence

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## Introduction

The modernization of education has become an important part of social policy not only in Kazakhstan, but also in most of the developed world. Currently, there is no doubt that the educational system of Kazakhstan should be integrated into the world educational space (Massyrova et al., 2015).

It is obvious that the current transformation in the Republic of Kazakhstan, new strategic approaches to economic development, openness of society with its dynamic nature and rapid informatization have changed the educational requirements, as "a pedagogical thought always developed in close harmony with the change of social relations" (Khmel, 1998). Therefore, at the beginning of

**CORRESPONDENCE** Arman S. Akhmetov ✉ arman.ahmetov@mail.ru

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the third millennium, the need to revise educational objectives has become relevant.

This trend is reflected in the Address of the President of the Republic of Kazakhstan N. Nazarbayev to the Nation “Kazakhstan's Way – 2050: Common Aim, Common Interests, Common future”, which states that “one of the results of learning should be mastery of critical thinking skills” (2014). It is noteworthy that the requirement to develop critical thinking in school graduates is new to the education system of the Republic of Kazakhstan (Fimyar & Kurakbayev, 2016). This raises the question whether our teachers would be willing to improve critical thinking skills of students.

It is widely documented that the vocational training process includes solving tasks scheme determining of what an expert needs to know in accordance with the scope of duties, how this knowledge he/she will use in their professional work, and what personal qualities they should possess in order to apply the knowledge and skills in the best way (Khmel, 1998). Thus, if a teacher did not have adequate knowledge during the vocational training period by which he/she could achieve new goals, success of his/her professional activities is most likely to be doubtful.

### ***The concept of critical thinking in scientific literature***

It should be noted that scientific literature offers a sufficient number of definitions of "critical thinking" as well as views on its nature and structural components. Let us try to bring some of them in chronological order.

So, in the 80s, the so-called “The Delphi Report” published the agreed statement of critical thinking and the ideal critical thinker. It states: "Under the critical thinking (hereinafter referred to as CT), we understand the purposeful, self-regulating system of judgments used to interpret, analyze, evaluate and draw conclusions as well as to explain the evidential, conceptual, methodological, criteria-based, or contextual considerations on which the system of judgments is based. CT is of great importance as a tool for research. <...> Thus, CT liberates the education system and provides great opportunities for personal and social life. Without being a synonym for “good thinking”, CT is a pervasive and self-improving humanitarian phenomenon. The ideal critical thinker is meticulous, well-informed, reasonably trusting, open-minded, flexible, fair-minded in assessments, reasonable in his/her decisions, ready to reconsider his/her point of view, honestly admits his/her own weakness, has a clear understanding of the subject, quiet in difficult situations, persistent in the information search, reasonable in the selection criteria, focused on the knowledge and results that are as accurate as the circumstances and subject of study require. Thus, education of good critical thinker should be aimed at achieving this ideal. The education should include the development CT skills as well as cultivation of inner qualities that will contribute to a deeper understanding of things and form the basis of rational and democratic society” (Facione, 1990).

After the publication of “The Delphi Report”, various researchers have continued to express their points of view on the essence of critical thinking:

– Competent and responsible thinking, which helps correct judgment because it: 1) is based on criteria; 2) is a self-correcting; 3) takes into account the context (Lipman, 1995).

In the former USSR, the interest in critical thinking became the most intensely manifested since 2000s. For example, the following researchers outlined their positions on this issue:

– "Critical thinking is a series of mental activities aimed at verifying the statements or systems of statements in order to ascertain their discrepancy to accepted facts, norms or values. ... There are levels of critical thinking, each of which has its own kind of reasoning, characterized by different ratios of logical and cognitive components: 1) an empirical level is a critical examination of the facts; 2) theoretical level - a critical test of theories; 3) metatheoretical level - a critical test of norms and values" (Bryushinkin, 2003);

– "Critical thinking presupposes skills of reflection about their own mental activity, ability to work with concepts, judgments, conclusions, issues, capacity to analytical activities, as well as to the assessment of similar opportunities of others. In general, critical thinking is characterized by practical orientation. Because of this, it can be interpreted as a form of practical logic, considered within and depending on the context of reasoning and individual characteristics of the subject of reasoning" (Sorina, 2003);

– "The mechanism of critical thinking involves mental operations that define the process of reasoning and argumentation: goal setting, problem identification, hypotheses, arguments and rationale for them, prediction of consequences, acceptance or rejection of alternative points of view. It includes the ability to apply basic intellectual skills (knowledge and comprehending) for the synthesis, analysis and evaluation of complex and ambiguous situations and problems. This can involve the ability to identify problems and clarify the situation, the analysis of reasoning, comprehensive study of the issue, development of criteria for evaluating decisions and reliable sources of information, avoiding generalizations" (Fedotovskaya, 2003).

– Critical thinking embraces the skills of social and independent thinking. Information is the starting point of critical thinking, but not the final one. Critical thinking begins with raising an issue and understanding the problems to be solved. Critical thinking is directed to a convincing argument (Klooster, 2005).

After a comparative analysis of the works of these authors, we came to the conclusion that their positions may have some differences both in the approaches to the determination of the "critical thinking" concept and to the determination of its structure as well as to criteria and indicators required for diagnosis. Basically, most authors agree that a critical thinking person should be familiar with the logic and be able to argue convincingly, which is, in fact, the quintessence of logic. For instance, A. Ivin (2001) says that "logical culture, as an important part of the general culture of a person, includes many components. But the most important component which connects all the other components as in the optical focus is the ability to argue convincingly".

Based on the findings, it is difficult to consider the need to develop critical thinking in education as something entirely new because the existence of such science as logic is measured in hundreds of years. Assuming there is currently no successfully functioning, single, common approach to solving the problem of critical thinking development within the higher pedagogical education in the Republic of Kazakhstan we decided to make an attempt to research the essence of critical thinking using the modern scientific achievements. The main goal of

our theoretical study is to answer the question of “how to help students develop as critical thinkers in view of the achievements of modern science”. This is the novelty of our research directions.

### **Method**

Research methodology is based on the theoretical pedagogical methods, namely on the method of generalization of teaching experience and comparative analysis of pedagogical literature. The scientific conception of emotional intelligence, proposed by P. Salovey & J.D. Mayer (1989), was used by authors as the source material.

### **Data, Analysis, and Results**

#### ***Thinking skills of students***

Unfortunately, as noted by A. Ivin (2011), some students incline “to believe that their own thinking is a natural process that requires analysis and control of no more than, for instance, breathing or walking”. Such an attitude to thinking is wrong because it has certain stages of ontogenetic development. Moreover, targeted impacts in the form of training and education play a special role in the development of thinking (Rapatsevich, 2005). Thus, it can be concluded that to obtain reliable knowledge during the learning process, a person needs to think, and thinking in turn should be purposefully trained.

The analysis of studies of K.V. Sudakov (1998) and A.G. Voytov (1999) has allowed us to agree with the following statement: in order to receive true knowledge in the process of thinking, it is necessary to observe the following two conditions:

- the primary judgements (references) from which the conclusions are formed must be true;
- the structure of thought must be right.

Consequently, in order to think critically successfully it is necessary to know and be able to apply the formal logic, and also be able to determine the truth, and reliability of the primary judgements (references), from which the conclusion is formed. It is important here to note, as E. Bono (1995) states, that: “Overstatement of the possibilities of logic is one of the biggest errors of traditional thinking. This misunderstanding appears because of inability to differ the foresight from judgement. The logic is only a closed system that processes only those elements which are in its framework. <...> Any valuable creative idea always will be absolutely logical in the retrospective view. We can sum up the figures from 1 to 100 during 5 seconds, using the idea absolutely logical in the retrospective view – but in order to understand this idea, we need a creative approach. The same happens with the retrospective view: things which seem to be completely evident in the retrospective view, can be invisible in the prospective view. The inability to understand it leads to many wrong beliefs, connected with thinking”. This is also true because if to appeal to the history then the process of knowledge formation, as a matter of fact, represents the fight of different ideas, erroneous views and perceptions (Bryushinkin, 2003).

Thus, the knowledge of formal logic and ability to determine the truth and reliability of the primary judgements (references), from which the conclusion is formed, is a necessary, but not a sufficient condition for thinking successfully.

The creativity factor should be added to these two conditions (Zagashev & Zaire-Beck, 2003).

### ***Emotional intelligence in the thinking process***

Emotions play an enormous role in the cognitive activity (Rapatsевич, 2005; Karpenko, 1985). There is an opinion that feelings are subjective and intricate, that is why they cannot be taken into account in the objective process of logical thinking. E. Bono (1995) considers it to be absolute absurd: “The feelings really exist and play a big role in our thinking. Finally, namely by means of feelings we evaluate the final result of the cognitive process. Thinking is called to serve for our estimations and feelings”. Such view on the problem makes the complete overturn in the previous understanding of the conflict between the mind and feeling: we don’t need to get rid of emotions and replace them by the mind. Within the old paradigm the mind is theoretically free from the influence of emotions.

Owing to the researches of such scientists as H. Gardner (2007), a specialist in the area of clinical psychology and neuropsychology, and also psychologist of the university in New Hampshire J. Mayer (1989), who developed a theory of emotional intelligence together with the professor of Yale University P. Salovey & J.D. Mayer (1989), one-sided view of the scientists about mental life, deprived of emotions, which serves a starting point of the intelligence researches during the last eighty years, has been gradually changed as far as psychology begins to understand how essential the role of feeling and thinking is. D. Goleman (2009), a psychologist, scientific journalist, specialized in sciences about brain, in his book “Emotional intelligence” writes that a high coefficient of the intellectual development doesn’t ensure the success, prestige or happiness in life, although our educational establishments and culture are caught in the endless loop about the academic abilities, ignoring the emotional intelligence that has a huge value for our personal destiny. The emotional life is a sphere which can be managed more or less skillfully and similarly reliably as mathematics or reading. He also states that our level of abilities is undoubtedly determined by the nervous system, but the brain is surprisingly flexible and it is constantly learning. Omissions in the emotional giftedness can be corrected: each of these areas considerably represents an aggregate of habits and responsive reactions which at application of the proper efforts can be changed for better.

P. Salovey & J.D. Mayer (1989) determined five main areas in which the emotional intelligence is displayed:

1. Knowledge of your own emotions, i.e. recognition of any feeling, when it appears;
2. Management of the emotions, i.e. ability to cope with the feelings for them not to come beyond the proper frameworks. An ability to calm down, get rid of the impetuous anxiety, low spirit or irritability;
3. Motivation for yourself. Putting emotions into the order to achieve the aim is necessary for concentration of attention, self-motivation, self-control and for being able to create. Self-control over emotions – delay of satisfaction and suppression of impulsiveness – lies in the basis of any achievement.

4. Recognition of the emotions in other people. People, in tune with delicate social signals which specify what other people want or need, can be more successful in the process of social interaction.

5. Support of the interrelations. An ability to support interrelations considerably lies in the skillful treatment of the emotions of the others. People with similar talents, perfectly manage all deeds, the success of which depends on the skillful interaction with others (Goleman, 2009).

## Discussion

It is important to note that there is a belief that critical thinking is the direct opposite of creative thinking (Tishman, Jay & Perkins, 1993). Creative thinking is the thinking, the result of which is the discovery of a fundamentally new or improved problem solution. Critical thinking comprises the examination of offered solutions with the aim to define the scope of their possible application. Creative thinking is aimed at creating new ideas and critical thinking identifies their shortcomings and defects. To effectively meet the challenges, both kinds of thinking are needed, although they are used separately: creative thinking is a hindrance to the critical one, and vice versa. We do not agree with the above thesis and believe that it is impossible (and unnecessary) to oppose the critical and creative ways of thinking in the real life and teaching practice.

So, mulling over the nature of critical thinking, I.O. Zagashev & S.I. Zaire-Beck (2003), in our opinion, reasonably notes the close relationship of critical and creative thinking. “Critical thinking, researcher says, means estimated, reflective thinking. This is the open-minded thinking which does not accept dogmas and improves by applying new information on the personal experience of life. This is the difference between critical and creative thinking which does not provide for an assessment, and involves the production of new ideas, often beyond the experience of life, external rules and regulations. However, it is difficult to draw a clear distinction between critical and creative thinking. We can say that critical thinking is the starting point for the development of creative thinking. Moreover, being interdependent, both critical and creative thinking are developing in the synthesis” (Fedorov, 2007).

We have conducted an analysis of state educational standards of pedagogical specialties and found that they do not include any discipline aimed directly at gaining knowledge by students necessary for teaching pupils critical thinking (at least since 2010 and later). Here we note the views of J. Baron (1990), who believes that “Critical thinking does not automatically appear in the form of a by-product of the usual training in some area. To achieve the desired effect, it is required to make a systematic effort to improve thinking. It is obvious that before becoming eligible for developing critical thinking skills in pupils, teachers need to learn these skills.

The validity of this claim stems from the fact that “any subject area of human activity is reflected in the system of knowledge. Successful activity of a person is impossible without the formation of coherent objects of the consciousness synthetic character. Coherent objects of consciousness, formed as a result of the development of knowledge about a particular area of reality, is a



way of joining external requirements for the activity of the subject and the subjective value orientation” (Nepomnyaschaya, 1972). Thus, from the above, we can conclude that there is a contradiction between the need for assimilation of critical thinking skills by teachers and the lack of adequate training for future teachers to achieve this goal in today’s higher educational institutions of the Republic of Kazakhstan. Identified contradictions have determined the direction of our research.

We also believe that the list of application areas of emotional intelligence, offered by P. Salovey & J.D. Mayer (1989), can be expressed more laconically and without loss of content-richness. So it is possible to suppose that the criteria for estimation of the emotional intelligence level formation are rationality (conciseness, appropriateness) of the management of the emotions (both positive and negative), and also recognition and interpretation of the emotional state of other people with the same aim of the rational correction of behaviour.

### Conclusion

So, according to the results of our theoretical research carried out on the basis of modern science achievements, we have come to the following conclusions that a modern person can *ceteris paribus* learn to think critically not only by knowledge of formal logic, but also due to the ability to determine the truth, reliability of the primary judgements, from which the argumentation is formed; a creative approach to thinking and the developed emotional intelligence.

In general, it should be noted that the results obtained from our theoretical studies indicate that the set goal is successfully achieved, but require practical verification. However, our work does not solve the problems of this research. In our opinion, the perspective issues for further study are: 1) Special training for professors of the university on how to solve the problem of the proper formation of critical thinking among students; 2) The study of opportunities regarding the teacher training system to prepare them for the development of critical thinking among students; 3) Development of critical thinking in pupils.

Thus, due to the results of this theoretical study, we hope to attract attention of the pedagogical public, find like-minded people and probably, in the perspective, to arrange mutually beneficial cooperation with people who are not indifferent to the study direction.

### Disclosure statement

No potential conflict of interest was reported by the authors.

### Notes on contributors

**Arman S. Akhmetov** is a PhD, Associate Professor of Economics, law and philosophy Department, Pavlodar State Pedagogical Institute, Pavlodar, Kazakhstan.

**Dmitriy P. Muchkin** is a PhD, Associate Professor of Pedagogy Department, Pavlodar State Pedagogical Institute, Pavlodar, Kazakhstan.

**Elnar Sh. Utyubayev** Holds a Master Degree, Chief of the Educational Work Department, Pavlodar State Pedagogical Institute, Pavlodar, Kazakhstan.

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