

PEDAGOGICAL NEED AND THEORETICAL FRAMEWORKS FOR THE DEVELOPMENT OF ANALYTICAL THINKING IN FUTURE TEACHERS-PHILOLOGISTS

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Abstract. *The article discusses the pedagogical need for the development of analytical thinking among future philological teachers, factors for the development of analytical thinking, scientific and theoretical foundations.*

Keywords: *thinking, analytics, analytical thinking, erudition, mental activity, analysis, ability, qualifications, quick wit, competence.*

The development of a certain society depends, first of all, on the thinking capacity, ability to think, the progress and goodness of the views of the people who formed it. The development of the thinking competence of future teachers has a positive effect on the quality of education, the future of students, and the development of the country. The teacher is the leading intellectual person in the stabilization of students' ability to think.

Uzbek pedagogue scientist Abdulla Avloni said: "Education of thought is the most necessary, sacred task that has been entrusted to the attention of teachers and entrusted to their conscience since many times. This education needs the help of teachers to such an extent that the strength, beauty, and breadth of thought depend on the teacher's education" [3; p. 78]. From these thoughts of the owner of a huge pedagogical experience, it will be possible to understand that improving analytical thinking in future teachers is one of the most important problems.

German pedagogue scientist A. Disterweg said: "The most important thing in any education and upbringing is the teacher, his world of thought" [6; p. 123]. It is clear from this that the wider the teacher's world of thought, the higher the students' thinking skills. An intelligent teacher encourages the student to think, teaches him to work mentally, forms motivation from the intellectual "eureka" by means of problem-based educational methods, conceptual questions and assignments. This leads to the development of the student's thinking ability. As a result, the student will have the opportunity to learn and master all subjects in depth.

A teacher is an ideal person in the eyes of a student. In the eyes of the student, the teacher knows everything, has a thorough grasp of knowledge, has a broad worldview, and is a high thinker. In fact, it should be so. It is required that a teacher be the most influential person in the society, a knowledgeable, intelligent, possessor of spiritual qualities, a hard worker, and a conscientious person. In particular, the teacher's thoughtful approach to each issue, comprehensive thinking, and reasonable conclusions attracts the attention of students. A teacher's personal example of thinking has a significant impact on the formation of students' ability to think. One of the golden rules of education is that a teacher can always give students only the knowledge they have. If the teacher does not have sufficient knowledge, professional potential, methodical experience, and elegant moral qualities, the scope of thinking is narrow, then his students also have ignorance, empty learning of subjects, and narrow-mindedness. All this determines that the issue of teacher training is one of the most important issues in higher education.

Today's higher education is faced with a sharp dilemma: should we train personnel with a diploma or a specialist who knows his job well? Of course, it is necessary to train a specialist who can work efficiently in a rapidly developing environment and in an increasingly competitive situation. He should be such a specialist that he can find his way in any situation, adapt to any conditions, apply any useful innovation in his professional activity, and look at any issue critically and from different angles. To be a specialist who meets these requirements, a person must have analytical thinking. In order to form a student who can think analytically, including a future philologist-teacher, they should be able to quickly understand the essence of any information, be able to critically approach it, interpret it, be able to divide information into specific parts, fill and enrich it, distinguish important and insignificant aspects in it, reason between its parts. It is necessary to develop the skills of determining the consequences.

It is not a secret that in the era of globalization, the content, form, and requirements of the textbooks taught in schools have changed radically. If in the textbooks of the recent past, the main focus was on providing students with ready-made knowledge, memorizing theoretical rules, and retelling what was taught, then in modern textbooks, teaching students to think independently, critically, creatively, and analytically is the main issue. The introduction of advanced foreign experiences into pedagogical practice, the use of international assessment programs PISA, TIMSS, PIRLS, TALIS, the international educational standard classifier (MSKO-2011) and STEAM standards, the introduction of modern forms, methods and technologies of teaching and assessment of concrete and natural sciences, the first, it requires further development of professional competences of pedagogic personnel, future teachers, and improvement of their thinking ability.

Based on innovative approaches, the world is increasingly expanding the volume of scientific research on strengthening the analytical thinking abilities of students and future teachers, increasing their intellectual potential, strengthening moral and ideological immunity, and determining the competence of working with information. In particular, the issue of improving the analytical thinking of future teachers becomes a priority in bringing the training of mature qualified specialists in line with global trends. In the process of solving any problem, primarily through independent thinking and critical analysis, the need and importance of analytical thinking becomes clear. In analytical thinking, it is necessary to note such aspects as the speed of thinking, the breadth of approach to the problem from different sides, the accuracy of finding the most suitable and effective solution to the problem.

In the Decree of the President of the Republic of Uzbekistan Sh.M. Mirziyoev "On the Strategy of Actions for the Further Development of the Republic of Uzbekistan" it is stated that "Education of physically healthy, spiritually and mentally developed, independent thinking, loyal to the Motherland, with a firm outlook on life, deepening of democratic reforms and development of civil society increasing their social activity in the process..." [1] means that the problem of youth education, especially the formation of analytical thinking in them, is one of the most important issues of the country's policy.

Teaching a person to think has always been relevant in world civilization. American inventor and entrepreneur Thomas Alva Edison said: "The great task of civilization is to teach man to think" [6; p. 118]. The great Russian writer L.N.Tolstoy said: "It's all about thinking. The beginning of everything is an idea. Therefore, the main condition for improvement is to work on the idea" [6; p. 140]. It is appropriate to start the thinking competence of future philologist-teachers by strengthening their theoretical knowledge in this regard.

"Philosophy. "Thinking (Arabic - thinking, intellectual knowledge)" in the "Encyclopedic Dictionary" is a rational stage of knowledge that determines the general, important features of objects and events, reflects internal, necessary connections between them, i.e. legal connections" [10; p. 390], is defined as.

From the opinions of French philosopher Joseph Ernest Renan: "Freedom of thought is the inviolable right of every person", Scottish philosopher David Hume: "Nothing can be as free as human thought" [6; p. 142], it is understood that freedom of thought is an important factor determining the freedom of a person. Through the means of thinking, a person understands the world, man, and his identity, perceives the essence of national values, customs, and traditions, feels a sense of honor, and understands the need to protect it. The future of any nation depends primarily on a mature generation with independent thinking and analytical thinking. In this sense, teaching students to think analytically is one of the most important issues in the education system. Psychologist E. Goziev: "Thinking is a mental process that indirectly and generally reflects the reality of the environment with the help of speech, it is a mental activity aimed at understanding social causal connections, discovering new things and forecasting" [12; p. 6] - defines it as.

Psychologist L.S. Vygotsky said: "Thinking occurs on an instinctive and emotional basis. Its nature is activity and freedom. Thoughts are more subject to spiritual feelings than to mechanical laws and laws of logic when they arise. Thinking always comes into play in problematic situations. Where everything is easy, there is no need to think" [5; p. 207].

According to the philosopher René Descartes, thinking is a sign that a person exists in the world of light. Scientist wrote: "I think, therefore I exist" [12; p. 243]. Thinking is an evolving mental activity. Thinking is formed and developed in each person under the influence of internal aspirations and external factors. From early childhood, a person begins to seek to know the environment, the existence that surrounds him. It is this desire that gives him the ability to think. Professor L.S. Tsvetkova, doctor of psychological sciences, says that from the period of 1 year and two months to 1 year and seven months, the visual-action type of thinking begins to form in a child [16].

From the above, it is clear that the sign of a person's personality is first of all his ability to think. Scientists say that thinking usually begins with a problem, a question, a situation such as a lack of understanding or a solution to a contradiction [8; p. 383]. Thinking is activated in a problem situation, when there is a need to know about a specific situation or subject. Situations such as problems, questions, surprises, misunderstandings turn thinking into reality. Thought is thought in action, in which there is a tendency from individuality to generality and from generality to individuality. Thought is closely related to action. Action is a living form of thought. The primary type of thinking is thinking in action. Thinking is manifested in thought operations controlled by the conscious mind.

Psychologist A.V. Petrovsky said: "Thinking is a mental and socio-causal process closely related to speech, consisting of searching for and discovering important news. In other words, thinking is the process of analyzing and synthesizing reality directly and summarizing it [7; p. 14]". Thinking in practice does not exist in isolation as a purely mental process itself. It occurs in harmony with other mental processes, such as memory, attention, imagination, perception, which are closely connected with each other. The process of thinking reflects the sequence of mental actions and operations. Psychologists divide thinking operations into such types as analysis and synthesis, comparison, abstraction, generalization, concretization, classification, systematization

[7; pp. 30-47]. The essence of the analyzed problem or issue is determined in the process of a series of thinking operations.

As a result of the development of science, it is becoming known that the so-called mental-intellectual phenomenon is not uniform. For example, thinking is different from independent thinking, and analytical thinking is different from all other forms of thinking. Analytical thinking is one of the forms of thinking that stands out for its effectiveness in increasing the erudition and intelligence of a person. Because analytical thinking requires approaching the studied object from different sides, comprehensively checking its internal and external relations and coming to a stop. Since ancient times, the owners of such thinking were especially valued. People who could think like this were called analysts in ancient Greece. Since then, a unique complex type of thinking has been called analytics.

"Philosophy. About the term "analytics" in the "Encyclopedic Dictionary": "Analysis is the art of analysis, the art of separating concepts and elementary principles in order to have the character of discussion and proof. Analytics is a branch of logic. In the works "Topica" and "Second Analytics" Aristotle defined analytics as a rigorous, proven discussion" [10; p. 25].

The term "analytics" was first used by Aristotle as the name given to the technique of logical analysis. Aristotle in his work called "Analytics" [10] specifically focused on this way of thinking. In the work "Organone", the thinker said that in thinking according to the logic of "analytical thinking", two important aspects are: that the object, which is a complex whole, should be divided into simple parts at first, and that the thinking should become more and more complex as you examine them.

The German philosopher Immanuel Kant called analytics a human ability to understand, and in his Critique of Pure Consciousness, he is the first to propose dividing the way of knowing into two stages, such as analytical and synthetic thinking. He argued that analytical thinking is a priori, that is, it does not need confirmation in experience. Therefore, he wrote: "analytical thinking helps to understand the existing knowledge more clearly" [15].

The possessor of analytical thinking has the ability to understand the true nature of the issue, to understand its causes and consequences, to come to the necessary decision. Therefore, people who think in this way can make impartial, detailed and truthful conclusions about world events and human actions. Analytical thinking makes it possible to search for new information, study and systematize it, and come to the right decision based on the received information.

Analytical thinking:

- a) identification of information, detailed study;
- b) separation of information into specific parts;
- c) compare the data and find the relationship between them;
- d) impartial assessment of information;
- e) logical thinking;
- f) express the opinion consistently and correctly; or) relying only on evidence when thinking;
- g) to be able to distinguish important from unimportant information;
- h) ability to critically look at existing information; i) consider the possibility of alternative solutions;
- i) mental operations such as drawing conclusions are performed.

Analytical thinking is a mental process aimed at quickly and accurately finding the most correct solution by collecting a large amount of information that will be clear evidence of the problem being studied, approaching the problem from different angles, and analyzing the available evidence without forgetting its small aspects. Well-developed analytical thinking can quickly find the most effective and useful solutions to any complex problem. A person who can think in this way has the ability to think about any problem in a multi-faceted way, to plan his activities and to see the result.

Analytical thinking is the art of analytical thinking, the ability to come to a comprehensive, clear, deep, meaningful, solid conclusion about a problem, issue, information, and event. The possessor of analytical thinking carefully studies the analyzed object in every way: divides complex information into parts - thinks seriously about every word, sentence, detail, thing, logically connects the parts, comes to an acceptable conclusion and makes the necessary decisions. When thinking about any phenomenon, the possessor of analytical ability does not limit himself to reading the outer meaning of the event, but also tries to determine its inner layers. As a result, a comprehensive understanding of the analyzed object is created. Analytical thinking serves to ensure that a problem or issue is solved easily and quickly, correctly and accurately.

A person with an analytical mind thinks comprehensively when a problem arises: he analyzes the causes of the problem, the ways to eliminate it. A person with analytical thinking does not avoid the problem, but tries to solve it rationally. The diversity of each person's knowledge about the universe and humanity comes from the diversity of their level of thinking, and this diversity creates diversity in the way of thinking and expressing thoughts. This situation leads to the emergence of the analytical philosophical method, which gives rise to the concept of "analytical thinking". After all, the analytical philosophical method is characteristic of those who have a deep knowledge of the laws of language and speech, who can express each of their words meaningfully and logically. The capacity for such features is also evident in keeping up with the times.

Combining the above definitions and relationships, it is possible to explain the signs of the concept of analytical thinking as follows:

- analytical thinking is a type of mental activity that is strictly connected with logic, aimed at a clear, correct, objective, comprehensive analysis of the subject, a solid basis for acquiring knowledge in the educational process;

- analytical thinking - a productive way of thinking that allows to analyze all areas of social life, react, understand the past, perceive the present, predict the future, define promising ways of development, and is an important source of ensuring coherence and consistency in the educational system;

- analytical thinking is a creative way of thinking that encourages a person to promote innovative ideas, create new technologies, and put them into practice. An intensive way of preparing young people for social activation in the educational process;

- development of analytical thinking ability of students in the educational system - this allows to raise a well-rounded generation that thinks independently, can quickly find a rational solution to any problem, and is far from intellectual dependence. Analytical thinking is a mind generator that gives a person the power to perceive people and the world, and rationally activates his thinking mechanism.

K. Khusanboeva wrote in her doctoral research work: "Thinking is a mental-physical product naturally present in every mentally healthy person. It exists in everyone in his own way, at his intellectual level. In the process of education, it is possible to educate the form, quality, level of thinking, determine a certain direction, polish and develop it" [14].

It is clear from the scientist's thoughts that the formation of thinking does not start from nowhere, from "zero". It is a boon naturally present in a physiologically healthy person. During the educational process, the subject's thinking mechanisms are set in motion, activated. Analytical thinking is formed based on independent thinking, improves in the consistency of theoretical and practical activities.

However, a student, a future teacher will not acquire this ability just by listening to recommendations and instructions on the formation of analytical thinking, listening to long lectures. Theoretical knowledge paves the way for practice, but real learning and skills are built in practice. Analytical thinking is formed and develops in unity and consistency: in the family, in educational institutions, in production, in independent education. Analytical thinking ability is a product of continuous research and engagement in thinking.

Experts say that people can develop analytical thinking skills by regularly engaging in the following intelligence-enhancing activities:

- reading detective, fantasy, philosophical books;
- solving logical puzzles;
- work on puzzles such as crossword, scan word, rebus;
- playing chess;
- analyze daily information and events;
- striving to learn something new every day;
- participation in various intellectual debates;
- thinking about the environment;
- creating a thinking map;
- write down thoughts and conclusions;
- creating alternative versions of opinions;
- modeling and solving problem situations [18].

If you pay attention, the activities recommended for the formation of analytical thinking do not destroy the student's learning process, on the contrary, they increase his erudition and sharpen his thinking. Incorporating such interesting activities into the content of subjects, practical application will give a positive result. Interdisciplinarity and cooperation play an important role in this. When there is no systematic approach to the formation and development of independent, critical, analytical thinking of students in the teaching of all subjects, it will be difficult to achieve the expected result.

The basis of raising the level of professional training of a philologist-pedagogue is the formation of analytical thinking skills. Only a person who can think analytically can be a specialist with professional competence. Because such a philologist does not simply accept a work of art, but knows without a doubt its original value, educational significance, its place in the formation of the aesthetic taste of the nation, its influence on the development of national and world literature, and most importantly, the possibility of this work of art to create good qualities in the spirituality of the young generation can give a thoughtful spirit to his lesson.

Literature classes built based on analytical thinking instill in students a special love for books, create a strong interest and need for reading literary works, and form a culture of reading. Denis Diderot said: "When people stop reading, they also stop thinking" [6; p. 194]. However, just reading the fiction book you come across will not do you any good. A book is beneficial to a person only when it is read thoughtfully. Here, English political scientist E. Burke wrote: "Reading without observation is like indigestion", famous Russian pedagogue K.D. Ushinsky: "Reading does not mean anything yet, and reading what is read is the main thing" [6; p. 194], gives strength to those whose wisdom is said.

Learning to read works of art begins with school literary education. In higher literary education, the reading culture of students should be further improved on a scientific-pedagogical basis and raised to the level of professionalism. An analytically thinking student will master not only how to read and understand a work of art, but also the ways to perform all the intellectual-aesthetic actions performed with a literary text. In his future pedagogical or research activities, he can bring his students or recipients into the world of fiction and teach them how to get educational energy, spiritual education, and aesthetic nourishment from works of art. The independent thinking of the pupil and student who has achieved this will develop quickly, the ability to think critically will be strengthened, he will become an educated person who can feel the artistic word, analyze the artistic work he has read, and draw vital conclusions from it.

The Greek philosopher Democritus said: "There are two types of knowledge. One of them is knowing by means of feelings, the other is knowing by thinking" [14; p. 71]. Literary education serves to increase the level of knowledge of pupils and students through both emotions and thinking. A true work of art increases the knowledge of the reader by making him feel and move his senses. Feelings and knowledge motivate thinking. A work of art that is not fully understood affects neither the feeling nor the thought.

Focusing on the development of analytical thinking in higher education will make the future pedagogues analytically minded, thereby making the members of society as a whole able to think deeply and from all sides. Today's level of development requires any professional, especially a pedagogue, to plan his activities by comparing, dividing, summarizing, systematizing, modeling, classifying and targeting. Determination of the listed qualities requires the formation of analytical thinking in students at any level of higher education.

REFERENCES

1. Ўзбекистон Республикаси Президенти Ш.Мирзиёевнинг 2016 йил, 29 декабрдаги "2017-2021 йилларда мактабгача таълим тизимини янада такомиллаштириш чора-тадбирлари тўғрисида"ги ПҚ-2707-сонли Қарори.
2. Ўзбекистон Республикаси Президенти Шавкат Мирзиёевнинг 2017 йил 7 февралдаги "Ўзбекистон Республикасини янада ривожлантириш бўйича Ҳаракатлар стратегияси тўғрисида"ги ПФ-4947-сон фармони. // Халқ сўзи. 2017. 8 февраль № 28.
3. Абдулла Авлоний. Ўсон миллат. Истиқлол фидойилари.– Т.: Шарқ, 1993. – 99 б.
4. Алишер Навоий. Мукамал асарлар тўплами. 20 томлик. Т-8. Хамса: Фарҳод ва Ширин. –Т.: 1991. – 122 б.
5. Виготский Л.С. Педагогическая психология. – Москва, Педагогика, 1991. – 270 с.

6. Воронцов В., тўпловчи. Тафаккур гулшани. // Ватандош ҳамда хорижий алломаларнинг афоризмлари ва ҳикматли сўзлари–Т.: Ғафур Ғулом номидаги Адабиёт ва санъат нашриёти,1989. – 142 б.
7. Петровский А.В. ва бошқ. Умумий психология. – Т.: Ўқитувчи, 1992. – 353 б.
8. Рубинштейн С.Л. Основы общей психологии. – Питер, 2002.– 383 с.
9. Фалсафа //Ўқув қўлланма. Юсупов.Ю.Э. умумий таҳрири остида.– Т.: Шарқ, 1999. – 373 б.
10. Фалсафа. Қомусий луғат. Ўзбекистон файласуфлари миллий жамияти нашриёти, – Т.: Шарқ, 2004. – 390 б.
11. Шайх Мухаммад Содик Мухаммад Юсуф. Руҳий тарбия. – Т.: “SHARQ” нашриёт-матбаа акциядорлик компанияси бош таҳририяти. 2010 – 159 б.
12. Ўзбекистон Миллий энциклопедияси. Т.3. – Т.: 2002. – 243 б.
13. Ғозиев Э. Тафаккур психологияси. – Т.: Ўқитувчи, 1990. – 14 б.
14. Ҳусанбоева Қ. Адабий таълим жараёнида ўқувчиларни мустақил фикрлашга ўргатишнинг илмий-методик асослари. Пед. фан. доктори. дис. – Т.: 2007. – 258 б.
15. 100 мумтоз файласуф. Тақдирлар ҳикматлар афоризмлар. Тўпловчи ва таржимон Жўраева С. – Т.: Янги аср авлоди, 2017. – 105 б.
16. Электрон манба: Цветкова Л.С. [www https:// ru.m.wikipedia.org](https://ru.m.wikipedia.org)
17. Электрон манба: www.testcenter.kz/upload/.../ozbek-t1esse2018-dosx
18. Электрон манба: <https://womanadvice.ru/analiticheskiy-sklad-uma-uprazhneniya-dlya-razvitiya-analiticheskogo-myshleniya>.