

**HISTORICAL AND SCIENTIFIC BASIS OF THE STUDY OF REFLECTION IN
MODERN PEDAGOGY AND PSYCHOLOGY**

*Qorayev Abduvafo Fazliddinovich, head teacher,
e-mail: qorayevabduvafo@gmail.com, tel: 97-9198274
Samarkand State Institute of Foreign Languages*

Abstract

This article discusses the historical and scientific justification of the study of reflexivity in modern pedagogy and psychology. In the conditions of a continuous education system, the problem of training teachers who meet the modern requirements of the professional standard is one of the priority tasks. The solution to this problem is the need for regular work in educational institutions to develop the necessary qualities of a teacher. One of the qualities that affects the improvement of a teacher's professional skills and ensures compliance with the professional standard is reflexivity.

Keywords: Modern pedagogy, psychology, reflection, reflexivity, learning, history, scientific justification, continuous education, professional standard, requirements, video training, optimization, organization, foreign experience.

In world educational and scientific research institutions, scientific research is being conducted to improve the methodology for optimizing students' professional growth based on reflective video training, to improve the methodological foundations of introducing reflective video training into the educational process, to create the necessary information infrastructure, to organize reflective video training, to improve the methodology for optimizing students' professional growth based on reflective video training. Special attention is paid to the assimilation and targeted orientation of advanced foreign experiences, as well as to the organization of scientific research on methods for improving the content of educational and methodological activities of teaching through optimizing students' professional growth based on reflective video training in higher educational institutions.

In the conditions of a continuous education system, the problem of training teachers who meet the modern requirements of professional standards is one of the priority tasks.

The solution to this problem will require regular work in educational institutions to develop the necessary qualities of a teacher. One of the qualities that affects the improvement of a teacher's professional skills and ensures compliance with professional standards is reflexivity.

According to A.V. Karpov, "reflexivity is a component of reflection as a human characteristic" [1].

In the literature, the concepts of "reflection" and "reflexivity" are considered synonymous, therefore, the concepts of reflection and reflexivity are considered as the development of scientific theory, which defines reflexivity as an integral component of reflection.

The term "reflection" (from the Latin reflexio - "return"), which appeared in philosophy, denotes the process of thinking about everything that happens in the human mind. That is, it is a process of self-knowledge, revealing to a person the content of his spiritual world.

The concept of reflection was first introduced by ancient Greek philosophers. They define the task of reflection in human self-knowledge.

Reflection, as one of the mechanisms of thinking, provides the following processes in educational activities:

- understanding of predetermined educational tasks and results;

THE MULTIDISCIPLINARY JOURNAL OF SCIENCE AND TECHNOLOGY

VOLUME-5, ISSUE-2

- comparing tasks necessary for future activities with needs;
- understanding and mastering educational material through motivation of educational activities, logical connections between elements of educational material and memorization of content;
- evaluating and correcting the achieved results;
- solving problems through methods and schemes of comparison of tasks and requirements by analyzing and summarizing the results;
- self-management, self-control in educational activities using feedback are the results of reflection, which are the development and transformation of learners, their activation as subjects of educational activities [130].

According to Socrates, “one of the most important tasks of a person is to understand his spiritual activity in its cognitive function.” Plato noted “the special role of self-knowledge in the upbringing of such a quality as prudence or self-knowledge”. Aristotle understood “reflection as the unity of knowledge and the object of knowledge, that is, the property of divine consciousness that can be imagined and determine thought” [2].

One of the main problems of modern philosophy was the problem of substantiating knowledge and searching for the foundations of knowledge on a subject. In this regard, the meaning and content of the concept of reflection expanded.

Rene Descartes set himself the goal of “defining reflection as a person’s ability to focus on the content of his own thoughts, to be distracted from external things”.

John Locke considered “reflection to be a source of knowledge obtained through the senses, as opposed to internal or external experience” [3].

It is J. Locke who is considered the founder of the scientific study of reflection. Locke first distinguished reflection as a separate psychic reality, defining it as an action of the mind in relation to itself: “The mind observes its own activity and the ways of its manifestation, as a result of which ideas of this activity arise in the mind”.

In German classical philosophy, reflection was understood as the analysis by science of specific means of cognition or a special type of theoretical retrospection. Immanuel Kant considered reflection to be “the basis of the study of human cognitive abilities” and saw its specific role in the formation of concepts. He distinguished between logical reflection (a simple comparison of ideas about the world with each other) and transcendental reflection (the ideas being compared are a particular cognitive ability).

Georg Hegel considered “reflection to be a necessity for the implementation of the cognitive process”, but emphasized “the limitations of reflection” [4]. In reflection, he saw the driving force of the development of the human psyche. In general, for the philosophy of the 18th-19th centuries, reflection was considered “the procedure for searching for the absolute foundations of knowledge in order to build a holistic system of knowledge in them”.

The reflexive approach of Western European philosophy in the 19th-20th centuries was called upon to express the uniqueness of the subject of philosophy in the system of sciences, its separation from the subjective-sensual activity, and its focus on self-understanding.

The reflexive approach in philosophy includes the following areas:

- reflection on the content of knowledge presented in various forms of culture (art, language, science, etc.);
- reflection on the analysis of the thinking process itself, for example, methods and means of forming moral norms.

THE MULTIDISCIPLINARY JOURNAL OF SCIENCE AND TECHNOLOGY

VOLUME-5, ISSUE-2

In connection with the increasing stratification and integration of knowledge in the information society, the methodological function of reflection is actively developing. In this role, reflection is used to solve methodological problems such as organizing interdisciplinary scientific research and increasing the efficiency of managing large systems.

Reflection is used not only at the philosophical level, but also at the general scientific level, as a methodological tool for interdisciplinary developments or an explanatory principle for some social and humanitarian sciences (history of art, sociology, linguistics, etc.).

From the end of the 19th century to the beginning of the 20th century, psychologists showed particular interest in the problem of reflection. The mechanism of reflection as a method of self-knowledge was first used in the psychology of introspectionism. This is not considered reflection in the modern understanding.

Introspection (meaning “looking inward”) was used as a process of studying one’s own mental experience and recording an internal look at the spiritual content of one’s own consciousness. The reflexive method manifested itself as a separate category and methodological apparatus of scientific psychology [5].

In the 20th century, John Dewey was one of the first to study reflection. In his 1910 book *How We Think*, he defined reflexive thinking as: “The active, determined, and careful examination of any thought or supposed form of knowledge in terms of the grounds on which it is based, and the analysis of the subsequent conclusions it leads to.”

In the 1930s, A. Buseman defined the psychological definition of reflection as “the transfer of experience from the outside world to oneself in any way,” and from this he considered that the “psychological” definition of reflection is determined as the transfer of experience from the outside world to oneself. The author also proposed for the first time to distinguish the psychology of reflection as an independent field of study [6].

Within the framework of cognitive psychology, mental processes are analyzed as information processing processes, which are systems with input, output, and processing devices. The phenomena described by cognitivists - metamemory (memory of one's own memory) and metathinking (as processes of organizing thought) - are reflexive processes in nature.

In the development of the psychology of reflection, I.N. Semenov identifies five main stages [7]:

1. 1920-1950s. The stage is characterized by the development of psychology on the basis of the methodology of Marxism, and here reflection acts as a general psychological principle of cognition of conscious and voluntary mental phenomena (P.P. Blonsky, L.S. Vygotsky, S.V. Kravkov).
2. 1950-1960s. Scientific thinking in the methodology of scientific understanding (B.M. Kedrov, V.N. Sadovsky, G.P. Shedrovitsky, E.G. Yudin, etc.), the search for methodological means of systematic analysis of scientific knowledge, and modeling of human thinking on a computer. These problems gave rise to the creation of reflexive models such as “reflexive output” (G.P. Shedrovitskiy), “reflective system” (M.A. Rozov), “reflexive management” (V.A. Lefebvre) are relevant.
3. 1970s. Elimination of the dominance of the cybernetic paradigm inherent in the previous stage on the basis of the system-activity methodology. Differentiation of reflection problems begins and research is conducted on pedagogical psychology (V.V. Davidov), psychology of thinking (Yu.N. Kulyutkin, I.N. Semenov), problems of activity and its regulation (V.V. Davidov), reflexive processes (N.G. Alekseev, G.P. Shchedrovitsky), social psychology (K.E. Danilin), for the first time the role of reflection in solving typical and creative problems (I.N. Semenov, V.K. Zaretsky, S.Yu. Stepanov), where reflection is considered as an understanding of the means, methods and foundations of

THE MULTIDISCIPLINARY JOURNAL OF SCIENCE AND TECHNOLOGY

VOLUME-5, ISSUE-2

4. 1980s. The problem of the subject and method of psychological study of reflection was raised (I.N.Semenov, S.Yu.Stepanov). Two main approaches to understanding reflexive phenomena were formed. According to them, reflection is an activity “of establishing relationships between the connections of objects (stopping, fixation, objectification, alienation, symbolization), which is carried out through reflexive output and consists of five stages” (N.G.Alekseyev). In contrast to such an interpretation of thinking-activity, within the framework of the second approach, reflection is understood as a revision of the content of one’s consciousness by the integral “I” in a problematic-conflict situation. This process also includes five stages: reproduction of stereotypes, regression of experience, culmination of inspiration, development of self-awareness, production of innovations.

5. Mid-1980s-1990s. The significant expansion of the field of reflection research, combined with the increase in complex, interdisciplinary developments that synthesize the results of theoretical and empirical research within the framework of a systematic approach to the study of man.

At the present stage, the study of reflection is carried out within the framework of most branches of psychological knowledge (reflexive processes are consistently considered in social psychology, problems of self-awareness and self-development of the individual in general psychology, cognitive processes and regulation of activity, abilities and volitional activity in the psychology of development, as well as other issues of reflection in medical, pedagogical, organizational and management psychology).

The concept of “reflection” is inextricably linked with professional pedagogical activity. A reflective teacher with his own opinion can solve professional problems that cannot be put into any shell, such as the tasks of developing the personality of a growing person. Since the concept of reflection has entered the science of pedagogy relatively recently, a lot of research is currently being conducted in this area [7].

The problem of reflection and the influence of the profession on the individual, attracting the attention of researchers, is considered a pressing problem to this day. The constant interest in various aspects of pedagogical reflection is explained, on the one hand, by the complex of psychological and social problems associated with the life path of people, and on the other hand, by many important problematic and unresolved aspects.

The dissertation considers reflexivity, that is, the teacher's professional reflexivity, as an integral element of reflection, which is a characteristic of a developing personality.

Currently, in the scientific literature, there are practically no works by researchers that cover such issues as the emergence and development of a teacher's professional reflexivity, correction and elimination of professional deformation of the teacher's personality, as well as the professional development of a teacher. Thus, the lack of theoretical development determines the relevance of the problem of professional reflexivity of teachers as a condition for effective pedagogical activity today.

List of used literature:

1. Qarayev A. F. Refleksiv videotrening asosida boshlang‘ich ta‘lim yo‘nalishi talabalarning kasbiy o‘shirish. “Pedagogik mahorat” ilmiy-nazariy va metodik jurnal. 2023, №10, 202- b.
2. Malikov, R., Abdirashidova, G., & Abdirashidov, A. (2020). Approximate solution some delay differential equations using combination of the Laplace transform and the variational iteration method. *Int. Sci. J. Theor. Appl. Sci*, 85(5), 406-411.

THE MULTIDISCIPLINARY JOURNAL OF SCIENCE AND TECHNOLOGY

VOLUME-5, ISSUE-2

3. Raufovich, Malikov Ruslan. "GOOGLE DOCS VA SUN'IY INTELLEKTNING HAMKORLIKNI YARATISHDAGI O 'RNI." *Science and innovation 3.Special Issue 19* (2024): 373-375.
4. Qarayev, Abduvafo. "Oliy ta'limda "Matematika o'qitish metodikasi" Fanidan reflektiv videotrening yaratish metodikasi." *International conference on modern development of pedagogy and linguistics. Vol. 1. No. 8.* 2024.
5. Fayziyev M. A., Qarayev A. F. Reflektiv videotrenglar asosida talabalarni bilimlarini rivojlantirish // "USA" INTERNATIONAL SCIENTIFIC AND PRACTICAL CONFERENCE TOPICAL ISSUES OF SCIENCE. – 2023. – T. 8. – №. 1.
6. Jabbarova H. PHILOSOPHICAL CONCEPTS OF MASCULINITY AND FEMININITY IN ANCIENT PHILOSOPHY // *International Journal of Engineering Mathematics (Online)*. – 2024. – T. 6. – №. 1.
7. Qarayev A. THE METHODOLOGY OF CREATING A REFLECTIVE VIDEO TRAINING ON THE SCIENCE OF" MOTHER LANGUAGE TEACHING METHODOLOGY" IN HIGHER EDUCATION // *Multidisciplinary Journal of Science and Technology*. – 2024. – T. 4. – №. 9. – C. 106-111.
8. Toshturdiyevna K. D., Asfandiyarovich F. M. FORMATION OF THE SPIRITUAL HERITAGE OF TEMURY QUEENS IN SCHOOL GIRLS ON THE BASIS OF PEDAGOGICAL TECHNOLOGIES // *International Conference on Research Identity, Value and Ethics*. – 2023. – C. 47-51.
9. Shadiev R. et al. Comparing effects of STR versus SELT on cognitive load // *2019 Twelfth International Conference on Ubi-Media Computing (Ubi-Media)*. – IEEE, 2019. – C. 284-287.
10. Baigunisova G. et al. Flipped classroom method in higher education: a case of Kazakhstan // *International Conference on Innovative Technologies and Learning*. – Cham : Springer Nature Switzerland, 2023. – C. 232-241.
11. Shadiev R., Shadiev N., Fayziyev M. Facilitating online cross-cultural learning project with speech-enabled language translation technology // *2020 IEEE 20th International Conference on Advanced Learning Technologies (ICALT)*. – IEEE, 2020. – C. 223-225.
12. Lutfullaev, M. H., and M. A. Fayziyev. "Basics of the Internet." (2001).
13. Sarxadjanova I., Fayziyev M. UMUMIY PEDAGOGIKA FANINI O'QITISHDA TUSHUNCHALARNING MANTIQUIY SXEMASIDAN FOYDALANISH // *EDUCATION AND RESEARCH IN THE ERA OF DIGITAL TRANSFORMATION*. – 2025. – T. 1. – №. 1. – C. 616-621.
14. Rustam S. et al. Transforming language and cultural learning in virtual reality with 360-degree video technology // *Proceedings of the International CALL Research Conference*. – 2024. – T. 2024. – C. 235-246.
15. Asfandiyorovich F. M., Sadikovich K. N., Ilkhomovich T. N. Shaping Students' Creative Talents through the Study of Information Technology // *Turkish Online Journal of Qualitative Inquiry*. – 2021. – T. 12. – №. 10.