ABSTRACT

of thesis paper by Anar Serikovna Popandopulo on the topic "Development of Metacognition of University Students in the Process of Studying Psychological and Pedagogical Disciplines" presented for the degree of Doctor of Philosophy (PhD) in 6D010300 Pedagogy and Psychology

Research relevance. In accordance with the State Program for the Development of Education and Science of the Republic of Kazakhstan, the main areas of work to improve the quality of education are to ensure equal access for all participants of the educational process to the best educational resources and technologies; meeting the needs of students in obtaining an education that ensures success in a rapidly changing world; formation of an intellectually, physically and spiritually developed citizen of the Republic of Kazakhstan. "Academic knowledge, functional skills, personal competencies and relationships are no longer enough to prepare a student for life in such conditions. Absolutely new qualities are needed, such as metacognition, metacognitive knowledge". One of the main tasks facing education is to instill in students metacognitive competencies, strategies, skills and metacognitive abilities within the educational process, which will subsequently be reflected in academic success and in future professional activities, developing the level of metacognition.

The relevance of the research is enhanced by the need to develop and apply metacognitive training technologies in pedagogical practice and the lack of psychological and pedagogical theories and methodological developments that allow to implement a metasubject approach in educational practice. The study of metacognition reflects the development trends of modern science. This area is characterized by a variety of problems studied, methods used, results obtained, but at the same time it is generally accepted that metacognition is associated with ensuring the quality and effectiveness of activities.

The concept of metacognition and the study of metacognitive processes play a significant role in psychology and pedagogy. Significant research on the problem of the structure and dynamics of processes providing self-management of cognition is being conducted in the metacognitive psychology of foreign researchers (J.H. Flavell, R. Kluwe A. Brown, etc.). In recent years, the problem of metacognition has been developed in the studies of Russian researchers as M.A. Kholodnaya, A.V. Karpov, A.A. Pligin and others, and Kazakh scientists Zh.S. Bekbayeva, T.Yu. Lifanova, M.I. Karagozina, D.U. Kusainova, S. Mirseitova, N.T. Ospanova, A.A. Tashetov.

Metacognition is defined as a system of processes for the initiation, organization, construction and control of the subject (person) of his/her own activity, which determine the content, course and effectiveness of cognitive activity.

The conceptual foundations of the theory and practice of metacognition are reflected in a number of scientific works by J.H. Flavell, A. Brown, R. Kluwe, M. A. Kholodnaya, O.A. Konopkin; research of cognitive processes in the framework of the metacognitive direction – in the works of J.H. Flavell, J.R. Anderson, S. Taylor, R.E. Mayer, D.J. Hacker; scientific research of cognitive processes and the whole personality – in the works of J.H. Flavell, R. Kluwe, A. Brown, H.M. Wellman; applied research in cognitive learning – in the works of J.T. Jost, A.W. Kruglanski, T.O.

Nelson; research in the field of neuropsychology of metacognitive processes – in the works of K. Vogeley, K.E. Weed, A.R. Luria; principles of the metacognitive approach in general psychology and educational psychology – A.V. Karpov, M.M. Kashapov, M.A. Cold, A. Brown, R. Bjork, J. Dunlosky, A. Koriat, J. Metcalfe, J. Flavell, G. Schraw; metacognitive activity of students with various aspects of academic success – J. Hattie, L. Bol, P. Grimes, H. Everson, D. Hacker, M. Keener, L. Stankov, Z. Tobias, B. Wagener; psychological and pedagogical models of metacognitive activity in solving educational problems – M. Boekaerts, F. Winne and E. Hadwin, P. Pintrich, Z. Tobias and H. Everson, D. Hacker; ideas about heuristic mechanisms for constructing judgments of metacognitive monitoring – A. Koriat, J. Metcalfe, L. Reder, B. Schwartz; development of critical thinking – T.Yu. Lifanova; research on the problem of using media resources in the development of critical thinking of future educational psychologists – A.A. Tashetova; research on the role of metacognitive functions in professional activity; general psychological research on the study of the structural and functional patterns of metacognitive processes and abilities – B.G. Ananiev, A.G. Asmolov, K.A. Abulkhanova-Slavskaya; a systematic approach to research in the field of metacognitivism – I.V. Blauberg, V.N. Sadovsky, E.G. Yudin, technologization of the pedagogical process – N.Yu. Fominykh.

The analysis of the works of Kazakhstani scientists revealed the insufficient development of this area of research. However, individual components of metacognition are studied through the study of critical thinking, intellectual activity and cognitive processes.

The study of critical thinking was studied by G. Bekakhmetova and A. Korzhumbayeva, M.O. Kabysheva, A.I. Niyazbaeva; innovative technologies of education in the process of formation of intelligence – E. Zhumatayeva; modern education – Sh.M. Maigeldiyeva; the peculiarities of the development of the cognitive activity of students – A.Zh. Aplashova; cognitive activity of students – N.V. Mirza; technologies of teaching modeling in the classroom of psychological and pedagogical disciplines – B.G. Sarsenbayeva; organization of independent work of students – M.E. Nurgaliyeva, K.B. Smatova; teaching disciplines through the metasubject approach – A.Zh. Zhumabayeva; the study of the dynamics of self-awareness of the personality of students of a modern university – R.Sh. Sabirova; the foundations of the development of professional thinking of students – G.B. Kodekova; development of intellectual abilities of students – A.K. Mynbayeva, V.T. Tikhomirova, A.V. Vishnevskaya.

Research in this area highlights the importance of both metacognitive knowledge, metacognitive skills and metacognitive strategies in learning. Metacognition is a critical but often overlooked component of learning.

At the same time, it should be noted that the problem of the development of metacognition of university students in the process of studying psychological and pedagogical disciplines has not been sufficiently developed in the theory and practice of modern education.

Analysis of psychological, pedagogical and methodological literature on the research topic identified the following **contradictions** between the theoretical and practical significance of the development of metacognition of university students in the

process of studying psychological and pedagogical disciplines and the insufficient development of this problem in the theory and practice of modern education.

The problem of the research was the search for ways of developing metacognition at the stage of professional training of students in the process of studying psychological and pedagogical disciplines at a university.

The relevance of the research and its insufficient elaboration in the context of higher education determined the choice of the topic: **"Development of metacognition of university students in the process of studying psychological and pedagogical disciplines".**

Research objective – theoretical justification and experimental verification of the development of metacognition of university students in the process of studying psychological and pedagogical disciplines.

Object – metacognition of university students.

Subject – the process of developing metacognition of university students in the process of studying psychological and pedagogical disciplines.

Research hypothesis – **if** the development of metacognition of university students is carried out on the basis of the proposed theoretical model, then this will increase the effectiveness of the development of metacognition of university students in the process of studying psychological and pedagogical disciplines, **since** favorable conditions will be created.

The objective and hypothesis of the study were further developed and specified in solving the following tasks:

1. Analyze the current state of development of metacognition of students in psychological and pedagogical science.

2. Substantiate methodological approaches to the development of students' metacognition and discover the essence of the concept of "students' metacognition" and its development in the process of studying psychological and pedagogical disciplines.

3. Determine the methods and ways of developing metacognition of university students in the process of studying psychological and pedagogical disciplines.

4. Scientifically substantiate and develop a theoretical model for the development of metacognition of university students in the process of studying psychological and pedagogical disciplines.

5. Experimentally test the effectiveness of the proposed model for the development of metacognition of university students in the process of studying psychological and pedagogical disciplines.

The leading idea is that the effectiveness of teaching students at a university is determined by the implementation of the development of metacognition of students, formed within the framework of the developed model in the process of studying psychological and pedagogical disciplines.

The theoretical and methodological basis of the study is:

competence-based approach (S.F. Anisimov, V.I. Boydenko, E.V. Bondarevskaya, N.A. Grishanova, V.N. Kunitsina, A.K. Markova, etc.); personality-activity approach (L.S.Vygotsky, P.Ya. Galperin, A.N. Leontyev, S.M. Dzhakupov, Z.B. Madaliyeva, S.L. Rubinstein, etc.); systematic approach (I.V. Blauberg, A.A.

Bulatbayeva, V.P. Davydov, P.I. Obraztsov, V.N. Sadovsky, etc.); metasubject approach (Yu.V. Gromyko, N.V. Gromyko, A.V. Khutorskoy, A.G. Asmolov, E.Ya. Arshansky, O.V. Petunin, V.R. Imakayeva, V.N. Klepikova , S.G. Vorovshchikov, etc.); modern theories and concepts of higher professional education (O.A. Abdullina, S.I. Arkhangelsky, V.A. Slastenin, etc.); theory of a holistic pedagogical process (Yu.K. Babansky, N.D. Khmel, etc.); metacognition theory (J.H Flavell); theory of the formation of critical thinking (V.A. Bolotov, A.V. Butenko, A.V. Korzhuyev, V.A. Popkov, G.B. Sorina, D.M. Shakirova, L.I. Shragina, M. Veksler , A.S. Bayramov, A.I. Lipkina, U.M. Munchayeva, V.M. Sinelnikov, L.A. Rybak, A.V. Batarshev, R.M. Garanina, N.F. Talyzina and others); the concept of intelligence and the concept of mental experience (M.A.Kholodnaya); metasystem approach (A.V. Karpov).

Research methods: theoretical analysis of scientific psychological, pedagogical and special literature on the research problem; analysis of legislative and regulatory documents on the implementation of metacognition in the educational process of the university; modeling; analysis and generalization of psychological and pedagogical experience; survey methods (conversation, questionnaire, interviewing); observation; analysis of student activity results; experiment, methods of mathematical statistics for processing experimental data.

The main sources for the research were the official materials of the government of the Republic of Kazakhstan and regulatory documents regulating metacognition in the educational process in the universities of the Republic of Kazakhstan: the Law of the Republic of Kazakhstan "On Education"; State program for the development of education in the Republic of Kazakhstan for 2020-2025; State compulsory standard of higher education; educational programs, curricula of specialties of the direction "Education"; the studies of Kazakhstani and foreign scientists on the problem under study; practical experience of the author.

Research novelty:

– a theoretical analysis of the current state of the problem of the development of students' metacognition in psychological and pedagogical science and practice has been carries out;

– methodological approaches to the development of metacognition of students have substantiated and the essence of the concept of "metacognition of students" and the features of its development in the process of studying psychological and pedagogical disciplines have been developed;

– methods and ways of development of metacognition of university students in the process of studying psychological and pedagogical disciplines have been specified;

– a theoretical model for the development of metacognition has been developed, psychological and pedagogical conditions for the development of metacognition of university students have been determined;

– the effectiveness of the proposed theoretical model for the development of metacognition of university students in the process of studying psychological and pedagogical disciplines has been experimentally tested.

The theoretical significance of the research lies in enriching the theory of training with new knowledge about the development of metacognition of university students in the process of studying psychological and pedagogical disciplines, in the

development of a theory and theoretical model for the development of metacognition of university students in the process of studying psychological and pedagogical disciplines.

The practical significance of the study lies in the fact that the developed theoretical provisions, conclusions, scientific and methodological recommendations can be used in the system of professional training of university students, and in the development of their metacognitive readiness.

In the course of the research, the following acts on the introduction of subjects of disciplines into the educational process of the university were involved and implemented: "Introduction to the Teaching Profession and the Foundations of Scientific Research", "Educational Psychology"; act on the implementation of methodological recommendations for undergoing pre-diploma practice was introduced; the act of the Modular educational program in the specialty 6B01101 - Pedagogy and Psychology was developed and introduced into the educational process of the university; an electronic manual "Educational Psychology" for the specialties in "Education" were developed and implemented.

Provisions submitted for defense:

1. Theoretical analysis of the current state of development of metacognition of students in psychological and pedagogical science.

2. Methodological approaches to the development of metacognition of students, the essence of the concept of "metacognition of students" and features of its development in the process of studying psychological and pedagogical disciplines.

3. Methods and ways of developing metacognition of university students in the process of studying psychological and pedagogical disciplines.

4. Theoretical model of the development of metacognition of university students in the process of studying psychological and pedagogical disciplines, psychological and pedagogical conditions for the development of metacognition of university students.

5. The results of experimental verification of the metacognition of university students in the process of studying psychological and pedagogical disciplines.

Testing and implementation of research results are presented at five international scientific-theoretical and scientific-practical conferences (Bulgaria, 2018; Nizhny Novgorod, 2020; Mogilev, 2020; Vinnytsya-Seoul, 2021; Pavlodar, 2020; Almaty, 2021); in journals recommended by the Committee for Quality Assurance in Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan - 4 publications ("Vestnik PSU": pedagogical series; ("Vestnik PSU": pedagogical series; ("Vestnik PSU": pedagogical series; "Vestnik KazNPU named after Abai": "Psychology" series; "Vestnik of the Academy of Pedagogical Sciences of Kazakhstan"); in an international journal with a non-zero impact factor included in the Scopus database – 1 publication (Netherlands, 2021).

Thesis structure: the thesis consists of an introduction, three sections, a conclusion, a list of references and appendixes.