



Psychological aspects of the formation of professional reflection in future teachers

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Annotation. The purpose of the article is to analyze the effectiveness of the experimental formation of professional reflection among students of the Stavropol State Pedagogical Institute of "Pedagogical education" direction. The article presents the methods and results of diagnostics reflection of thinking, behavior and activity of the subjects, as well as the parameters that are significant for professional reflection: cognitive, personal, empathic, motivational, communicative, organizational sphere of students. The directions of the formation of professional reflection in students-teachers, which are determined on the basis of a critical understanding of the results obtained, are substantiated. The conclusions are made on the basis of the analysis of the results obtained, and practical recommendations for teachers and students of higher pedagogical educational institutions are presented.

Keywords: professional reflection; future teachers; students; Pedagogical Institute; experiment; formation; reflection of thinking, behavior, activity; cognitive, personal, empathic, motivational, communicative, organizational sphere; psychological aspects.



Introduction

At the present stage of development of science and education, research in the field of teaching future teachers is of particular relevance and becoming the most important area of empirical research and theoretical research. The transition of education to a personality-oriented, competence-based paradigm aims at training theoretically literate, mobile, independent specialists who can use their knowledge in practice. Responsible attitude to work, goal setting skills and reflection are formed under appropriate conditions at the stage of vocational training at the university.

Formulation of the problem

The psychological competence of the teacher consists of a number of components. The federal state educational standard in the direction of “Pedagogical education” defines the tasks for which the graduate should be ready. The solution of these tasks is possible under the condition that the specialists have knowledge of the age and individual characteristics of students, the psychological patterns of training and education, and the ability to apply them in their professional activities; the formation of personal qualities of a teacher, skills of professional reflection is no less important.

The problem arises: what are the psychological conditions for the formation of professional reflection in students in the period of study in a pedagogical university?

Theoretical and methodological base of research

Theoretical and experimental study of the psychological conditions for the formation of professional reflection in students in the process of traditional and experimental teaching at the university was conducted at the Stavropol State Pedagogical Institute. The methodological basis of the study was: the principle of development (S.L. Rubinstein, 1946; L.S. Vygotsky, 1957; B.G. Ananyev, 1968, etc.); the principle of determinism (S.L. Rubinstein, 1959); system approach to the analysis of mental reflection and activity (B.G. Ananiev, 1968 and 1977; B.F. Lomov, 1975 and 1984; V.D. Shadrikov, 1982 - 2018; V.A. Ganzen, 1984, 2001); activity approach (A.N. Leontyev, 1960; V.D. Shadrikov, 1982 - 2018); system-functional approach to the consideration of reflection (A.V. Karpov, 1991-2018).

Theoretical analysis of the problem of professional reflection of the teacher [1; 2; 3; four; five; 7] allowed to consider this concept as an analysis of the personality of their professional activities in order to form the most optimal feedback between this activity and its reflection in the individual experience of the teacher.

Research methods

Reflection of thinking, behavior and activities of the subjects - students of the “Pedagogical Education” direction was studied using the following methods: reflection of thinking, methods of diagnosing the dynamics of problem solving (A.Z. Zak); behavior reflexion, methods of diagnosing behavioral models (S. Stanley); reflection of activity, methods of diagnosis of reflection of activity (V.D. Shadrikov). At the ascertaining stage of the experiment, a predominantly low level of development of these parameters in both groups was revealed. Nevertheless, the cluster analysis of reflection revealed a feature of the hierarchies of the components in its structure: the reflection of activity occupies the highest level, the reflection of behavior is the average level, the reflection of thinking is the basic level.

Clusters of parameters relevant to professional reflection were diagnosed: the cognitive, personal, empathic, motivational, communicative, and organizational sphere of students. The



following techniques were used:

Cognitive sphere:

- diagnostics of the development of thinking (A.Z. Zak);
- diagnostics of attention development (general test of G. Munsterberg);
- test of creativity (P. Torrens);
- test "Determination of the level of imagination" (Y.A. Ponomarev);

personal sphere:

- questionnaire of personal orientations (E. Shostrom, SAT (Self-Actualization Test) in adaptation by Yu.E. Aleshina, L.Ya. Gozman, M.V. Zagika, M.V. Kroz);

Empathic sphere:

- Methodology "Diagnosis of the level of empathy" (V.V. Boyko);

Motivational sphere:

- methods of diagnosing the individual on the motivation to success (T. Ehlers);

Organizational and communicative sphere:

- test "Communicative and organizational tendencies" (V.V. Sinyavsky, V.A. Fedoroshin).

Research results

At the ascertaining stage, predominantly high results were obtained of the level of development of the cognitive, personal sphere, and the average results of the level of development of the students' empathic, motivational, organizational, and communicative sphere.

The main directions of the formation of professional reflection in future teachers were developed based on these results and their critical reflection. To form an optimal reflection structure, it is necessary to take into account the fact that:

- reflection, as a partial quality, has an optimal effect on a parameter or group of parameters only if there is a relationship between them;

- based on research V.D. Shadrikov [6], reflection does not affect the activity as a whole, reflection affects its aspects with which it has connections. Therefore, the development of reflection only within the framework of training work is impossible; it is necessary to systematically include students in teaching activities during the period of work experience or in specially created imitational teaching activities;

- reflection should develop consistently, from the lowest level to the highest, while the stability of the formed constructs should grow proportionally;

- reflection is modified, therefore its formation should begin with the correction of non-optimal constructs. It is necessary for this, first, to form the subjects' perceptions about the methods of reflection and consolidate their understanding in practice; secondly, the constructs must be consistently connected at all levels.

The program of formation of professional reflection of future teachers has been developed. It is a complex of mini-lectures about the principles of the functioning of reflection, training sessions and professionally-oriented plot-role-playing games. The content of the tasks is consistently changing in accordance with the level of development of reflection. It has been suggested that the formation of reflection will be optimal under the condition of the simultaneous development of parameters that are significant for professional reflection: cognitive, personal, empathic, motivational, communicative, and organizational sphere of students. The development of the program is based on the module-integral principle of the formation of abilities, the principles of cognitive-emotional transition, problem-based learning, and the mutual influence of related



systems.

At the final stage of the experiment, repeated complex diagnostics was carried out in the experimental group and the control group.

A comparative analysis of the results of the diagnosis of reflection shows two opposite trends in the indicated groups. In the control group, there is a significant increase in the reflection of behavior against the background of a slight dynamics of reflection of activity and thinking. In the experimental group, the growth of indicators is very significant (at least 30%), the values of all parameters crossed the "high" threshold.

The analysis of the data obtained in the course of the experimental study allows to conclude that the formation of reflection should be:

- sequential (from basic components to higher);
- uniform (the focus of efforts on all components, there should be no significant difference in the dynamics of changes of one component compared to the others);
- purposeful (it is necessary to use special methods of reflection development, spontaneous development of reflection is unproductive and does not demonstrate significant growth dynamics);
- complementary (each component in the course of development must be synchronized with the previous one);
- coherent (requires a high level of synergy between the components of reflection).

The analysis of the results of the experiment made it possible to isolate several important points in the formation of professional reflection:

- the optimal structure is that structure of reflection, in which its connections with external significant aggregates are two-sided;
- optimally formed professional reflection is characterized by a uniform factor structure;
- the optimal structure of professional reflection is characterized by the absence of negative interaction between reflection and external aggregates;
- the most important psychological feature of the formation of reflection is the consistent formation of components, given their place in the hierarchy;
- the optimal structure of reflection corresponds to a set with a uniform distribution;
- The constructs included in the components of the structure of professional reflection are more dependent on motivational and personal clusters. Therefore, a correction of the subjects' self-esteem, the formation of motivation for personal growth and self-realization is necessary. Otherwise, the highest levels of development of reflection are unattainable, which means that the development of professional reflection is also unattainable. In order to resolve this problem, it is worthwhile to arbitrarily include elements of personal growth training within the scope of the class.

The program for the development of professional reflection, which includes the analysis of the student's own active position in the learning process and practical professional activity, is effective for the development of professional reflection. In the process of studying in the university, students, future teachers, along with traditional technologies, widely used methods of active learning (business games, trainings, problem situations).

Practical recommendations

1) Organization of special interaction with the student to discover the meaning and motivational significance of reflection, to develop a conscious desire to focus on the process and the results of mental activity.

2) Assimilation of a complex of methodological knowledge: on the structure of activity,



types of scientific thinking, logical principles underlying scientific knowledge, logic of evidence and explanations. The system of external requirements for the organization of activities.

3) The inclusion of students in the dialogues, disputes, conflicting situations, interactive mode, the method of conversation, the transition to the position of a new activity through the modeling of situations of future professional activity, setting the trainee in the role of a teacher.

4) Combining the analysis of the subject content of the activity with the analysis of its own ways of activity (sign-symbolic, structural-logical schemes, summarizing tables for structuring large sections of the material studied).

5) Development of conscious actions of self-control (analysis of goals, conditions, methods, results, training in self-assessment, correction of mistakes, stimulation of self-analysis processes).

6) Development of the processes of self-observation, tracking the presence or absence of knowledge, the habit of assessing the results.

7) Stimulation of self-posing scientific problems in developmental learning.

8) The presence of trial situations, solved together, taking into account the results of individual creative activity (“portfolio of achievements”).

9) Game training (organizational development games), group work (knowledge sharing, interpersonal interaction skills), imitation of professional activity, solving educational and production tasks.

10) Interactive forms of work, tasks for the realization of the following development goals, setting goals for self-development, an incentive to express actions in a word.

Preparation of highly qualified specialists at the modern level involves not only the organization of their deep, systematic and high-quality mastery of fundamental knowledge, the formation of relevant practical skills and abilities, but also the development of their motivational-need sphere, reflection, abilities for self-realization and creativity.

In the process of studying at the university, professional reflection is interconnected with the personal factors of future teachers, namely with motivation (mastering a profession, acquiring knowledge), with reflexivity itself, empathy, a general indicator of social intelligence, the level of internality (success achievements, optical interpersonal and production relations), a general indicator of life-meaning orientations and its individual indicators (result and locus control of life).

University teachers should play an important role in the development of the future teachers’ ability for professional reflection. They should definitely have a high level of development of professional reflection and be able to solve educational, educational and professional tasks in order to teach this to their students. Future experts in the development of professional reflection reveal their advantages and inner potential. Graduates must have the ability to set goals and be able to achieve them, focusing on their abilities and capabilities. This indicates a high development of personality. In the course of the development of professional reflection in future teachers, the idea of their own “I” expands. With the help of this, graduates are included in their professional activities at the stage of study at the university. They have a better professional reflection than younger students. At the final stage of their education, they have a meaningful and conscious need for self-development, they become reflexive with respect to their activities. The most important thing is that they begin to be active in the analysis of their experience and feelings.



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