Formation of professional competencies as a basis of professional self-determination of students of agricultural universities

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> Abstract. The article presents an analysis of the problem of the formation of professional competencies as the basis of students' professional selfdetermination. Attention is paid to comprehending the aspects of the competence-based approach in professional education, which was developed in foreign practice and introduced into the Russian educational paradigm and acquires specificity in the space of interaction with Russian scientific psychological and pedagogical traditions. The article describes the components of professional competence, comprehends the important points of professional self-determination of students, and presents the main tasks of psychological and pedagogical support of the process of professional selfdetermination of students.A person in the reflexive-value space of his professional self-determination can become the author of personal selfdevelopment and consciously transform his professional biography. However, it is important to understand that this process is largely determined by the external circumstances of life, economic, political, social conditions. In this regard, it is necessary to note the importance of the educational space, the activity of teachers, who by their activity create certain psychological and pedagogical conditions for the professional self-determination of students.

1 Introduction

Professional self-determination of personality is currently considered as one of the key new formations of adolescents. In this regard, the readiness for professional activity, the performance of labor duties in the space of a certain profession can be assessed as the final characteristic of the effective professional training of students in a higher educational institution. And the formation of professional competencies in the educational space of a higher educational institution must be assessed as an important basis for the professional self-determination of students who are sufficiently adapted to their future professional life, who quickly and efficiently navigate various problems and tasks related to mastering their chosen profession.

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2 Methods

The main research method was the method of analysis of psychological literature on the problem under study.

Many authors have addressed in their works to the comprehension and analysis of the problem of professional self-determination, the formation of professional competencies of students, the identification of personal aspirations, values, life-meaning orientations, life strategies, the development of professional identity, professional self-awareness of representatives of modern youth [1-18]. Motivation is considered as one of the main functions of mastering a profession [19-25].

The competence-based approach, which was developed in foreign practice and introduced into the Russian educational paradigm, is currently acquiring certain specificity in the space of interaction with domestic traditions, established scientific concepts [26-28].

It should be noted that at all times the problem of self-determination in the world of professions was relevant. However, at present, the importance and relevance of this problem is growing significantly. This is noted by Russian researchers who describe the current stage in the development of Russian society [29].

The authors draw attention to the intensive dynamics of the socio-economic and professional situation, cardinal changes in the labor market. Some professions disappear, completely new professions come to replace them, a reorientation of production arises, and functional duties are changing significantly, new professionally important qualities become relevant.

The changes that are taking place in the labor market today are greatly influenced by the coronavirus pandemic, which has hit humanity and is perceived by many as a stroke of fate, a special challenge to life that is difficult to cope with. A huge number of people suffer in these circumstances. And we are talking not only about physical suffering, but also about urgent problems associated with employment, difficulties in mastering a profession based on a distance format of interaction in the educational process. We can say that the sudden emergence of the problem of COVID-19 has further exacerbated the issues of human self-determination in modern society.

3 Results

It should be noted that in modern psychology there is no unique definition of selfdetermination concept. This concept is closely related to the concepts of "formation", "development". Sometimes these terms are used interchangeably.

In essence, professional self-determination is a significant change in the mental reality of a person in the process of mastering and carrying out educational and professional and labor (professional) activities. At the center of the activity there is the subject of professional development, a person who is defined in the world of professions.

Professional self-determination can be interpreted as a socialization process aimed at assigning by a person certain aspects of the profession space, for example, professional roles, professional interests, readiness for professional activity, professional knowledge, skills, abilities, professional competencies.

A significant driving force behind the professional self-determination of a person is the expressed desire of a person to integrate into a certain social context based on identification with social groups. The cultural and historical context determines the specificity of such integration.

There are various theories of professional self-determination. These theories can be presented in four main directions:

1) Differential diagnostic direction;

2) Psychodynamic direction;

3) Decision theory;

4) Development theory

The differential diagnostic direction is associated with the development of differential psychology and involves the following aspects:

- Each person, according to his individual qualities, primarily according to professionally significant abilities, is optimally suited to one single profession;

- Professional success and satisfaction with the profession are determined by the degree of correspondence between the individual qualities of a person and the requirements of the profession;

- Professional selection is, in essence, a conscious and rational process in which either the individual himself or the professional consultant determines the individual predisposition of psychological or physical qualities and correlates them with the requirements of various professions;

- Personal qualities are important for professional success and satisfaction.

In the context of the psychodynamic direction, the central role in choosing a profession and professional life is assigned to various forms of needs (life instincts, structural and personal instances, etc.).

Decision theory aims to investigate the process of choosing a profession. Here professional choice is assessed as a system of orientation in decision-making.

In development theory, professional self-determination is viewed as a sequence of qualitatively specific phases, where the dividing criterion is the content and form of translation of individual impulses into professional desires.

Considering the professional development of the personality, Russian researchers single out the personality as the most important factor in the progressive change in the human psyche. The emphasis in many studies is placed on the understanding of human subjectivity. The main criteria for the periodization of professional self-determination are considered the social situation of development and the leading type of activity. The process of professional development covers the period from the very beginning of the formation of a person's professional intentions to leaving professional life.

4 Discussion

Personal and professional self-determination is a process of personality development focused on a high level of professional achievement. In personal and professional self-determination, great importance is attached to the realization of the potential of the individual, since the individual is the subject of his development in activity through the search for an attitude to the world.

In general, among the main factors in choosing a profession, modern psychologists usually distinguish the following psychological phenomena:

- Interests of the individual (cognitive, professional interest in the profession, dispositions, preferences);

- The expressiveness/ lack of expression of the abilities necessary for success in a certain type of activity, including professional;

- Specificity of temperament;

- Character traits.

The above factors can be classified as subjective.

- The conditionally objective factors of choosing a profession include:
- The level of training (academic performance);
- Health status;

- Human awareness in the world of professions.

Factors in choosing a profession	Psychological phenomena		
Subjectivefactors	 Interests of the individual (cognitive, professional interest in the profession, dispositions, preferences); Theexpressiveness/ lack of expression of the abilities necessary for success in a certain type of activity, including professional; Specificity of temperament; Character traits 		
The conditionally objective factors	 The level of training (academic performance); Health status; Human awareness in the world of professions 		

Table 1. Factors in choosing a profession.	Table 1.	Factors	in c	hoosing	a pr	ofession.
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Certainly, the choice of profession is greatly influenced by some social characteristics:

- Social environment;

- Home conditions;

- Educational level of parents;

- The position of peers;

- The position of teachers (lecturers) and others.

Choosing a profession is a complex long-term process that is associated with the experience of satisfaction / dissatisfaction and is associated with the need to take responsibility.

Among the reasons leading to the wrong choice of profession are the following:

- The choice of a profession under the influence of the social environment, the choice of a professionis not based on their own ideas and preferences;

- A total attitude to the choice of a profession as to the choice of the absolutely finite, unchanging;

- Prejudices in relation to the world of professions;

-Transferring your attitude to a specific person as a representative of a certain profession to the profession itself;

- Reliance on the private aspects of the profession without taking into accounts the different characteristics and content of the profession;

- The desire to receive high salary without taking into account the specifics of professional activity;

- Ignorance and lack of consideration of their characteristics (physical, psychological), which are important when choosing a profession;

- Lack of awareness of professional activities and others.

Various methodological approaches, principles and conceptual provisions of the psychology of professional self-determination reflect the interaction of a person with the world of professions. This interaction is explored as an open, dynamic state.

The following processes can be attributed to the forms of professional self-determination:

- Professional development,

- Professionalization,

- Personal and professional development.

The emerging external (conditionally objective) obstacles and internal (subjective) psychological contradictions, barriers determine the vector of a person's professional development. They can act as productivity factors for professional development.

In Russian psychology, the social situation of development and the level of implementation of the leading type of activity are chosen as the basis for identifying the stages of professional self-determination.

Several stages are distinguished in the process of professional self-determination. The transition from one stage of professional self-determination to another is associated with a change in the change in the social situation of human development, a significant change in the content of the leading type of activity, the development or acquisition of a new social role for oneself and others and professional behavior. These changes, of course, contribute to the emergence of contradictions, difficulties, conflicts, cause deep feelings, anxiety and tension. The transitions from stage to stage are caused by crises of professional self-determination of the individual.

It should be noted that the leading activity in the context of one age period can change significantly: motivation, aspects of the performance of the activity, reflexive activity, etc. are transformed.

So-called alternative course of professional self-determination may arise. They can lead different people to dissimilar results: to productive self-realization, and to the extinction of professional functions, and to destructive consequences.

In the process of personalization, several stages can be distinguished and described:

- the stage of professional adaptation,

- primary professionalization,

- secondary professionalization,

- the stage of professional skill.

Self-realization of the personality as a subject occurs in the context of activity. In the field of our interest is the professional self-determination of students, therefore we turn to the study of various aspects of the educational and professional activities of students and place special emphasis on the study of the formation of students' professional competencies as the basis of their professional self-determination.

In the description of the prevailing forms of psychological regulation, three main levels of activity are currently distinguished:

1) reproductive level,

2) heuristic level,

3) creative level.

Gradually, in the process of educational and professional activities in various formats of education, students make the transition from one level to anotherhigher level. It is important to take these aspects into account when drawing up academic curriculum, preparing certain tasks for students, involving the formation of professional competencies. Practice shows that not all students are ready to complete tasks of a high (creative) level of complexity. They face serious difficulties and need specially organized psychological and pedagogical support. In the practice of university education, this often becomes a source of contradictions and conflicts in the student-teacher system and requires reflection.

The process of forming students' professional competencies is generally focused on mastering the content of professional competence, which is determined by the nature and specifics of a particular profession.

In the description of the professional competence model, several components are distinguished:

1) the emotional-volitional component, which to a certain extent reflects the experiences, emotions, feelings, priorities of the future specialist, his emotionally loaded attitude to professional activity, reactions to successes and failures, the ability to self-regulate their own behavior;

2) the motivational-value component, which is an important characteristic of the motivational side of the subject's activity and reflects the readiness for independent implementation of professional activity;

3) a cognitive component, which reflects cognitive activity, a manifestation of the cognitive abilities of a person, for example, the ability to adequately perceive and assimilate

educational and informational material, the presence of knowledge in the field of a particular profession. An important manifestation of the cognitive component is the intellectual involvement of a person who is interested in scientific research, open-mindedness to new knowledge in mastering a profession;

4) the communicative component, focused on the self-realization of the subject in conditions of interaction with the social environment and assuming the ability to initiate professional contacts, move in building relationships with partners, show dialog, construct social requests in various situations of interaction, expand their communicative repertoire;

4) a creative-activity component aimed at the implementation of creative abilities, the use of a creative approach in their work, in particular in the choice of methods, technologies, techniques for carrying out professional activities. This is manifested through ability of the subject of labor to design the prospects for development and results of activity, the ability to creative autonomy, independence in solving various professional tasks and overcoming emerging difficulties and contradictions, the ability to foresee the emergence of difficult situations in professional activities and to make the optimal choice of their prevention and coping with them.

There are various approaches to assessing the formation of students' professional competencies. A number of researchers put forward the opinion that the most important aspect in the professional training of students is not awareness, but the development of students' skills as future specialists in the field of a particular profession to solve emerging problems.

There is also an approach that can be called hypothetical. This approach is based on identifying the ideal image of a professional who is able to carry out actions, the effectiveness of which will largely depend on the specified competencies. In particular, the declaration of the Bologna Process reflects an understanding of the importance for modern society of high-quality professional training of future specialists, the use of standards as tools for regulating the level of education quality, its assessment, and the design features of quality management systems. The concept of "competence" in this case means the integrated characteristics of the quality of training of graduates in the description of the results of the educational process.

In some scientific sources, attention is paid to the so-called individual approach in the development of the professional competence of students. The emphasis here is on the mandatory consideration of the individual and personal characteristics of students: their attitudes, values, abilities, skills, knowledge necessary for the implementation of a certain labor function in various life circumstances.

Within the framework of the differential psychological approach, professional competence is considered as an integral professional and personal characteristic, which determines the ability to carry out professional functions in accordance with the norms and standards.

5 Conclusions

There are different interpretations in the description of aspects of the formation ofstudents' professional competence. But, despite this difference, it should be noted that in many respects the researchers agree. They note the idea that competence should not be equated with knowledge, skills and abilities. Competence is a broader concept. Competence implies the realization of the possibility of using knowledge in the context of activities when solving complex problems in non-standard situations.

A person in the reflexive-value space of his professional self-determination can become the author of personal self-development and consciously transform his professional biography. However, it is important to understand that this process is largely determined by the external circumstances of life, economic, political, social conditions. In this regard, it is necessary to note the importance of the educational space, the activity of teachers, who by their activity create certain psychological and pedagogical conditions for the professional self-determination of students.

The most important moment in the development of students' professional competencies is the development of their desire for independence, autonomy, the ability to take care of themselves in a broad sense, in the process of solving various educational and professional tasks. This is due to the development of the reflexive potential of students, their psychological culture.

Today, there are several tasks of psychological and pedagogical support for the professional self-determination of students:

- rendering assistance to a person who enters into working life, in an optimal way to decide for himself the question of choosing a profession;

- to assist in ensuring the adaptation of a person to the profession, as well as to find their own individual style in professional activity.

The implementation of psychological and pedagogical support of students is largely focused on the development of professional competencies as the basis of their professional self-determination.

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