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METHODOLOGY FOR ASSESSING THE EFFECTIVENESS OF UNIVERSITY STUDENTS PROFESSIONAL TOLERANCE SKILLS

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Abstract

It is a well-known fact that in today's world, in addition to professional knowledge and skills, a specialist must also possess certain personal characteristics that would allow him or her to remain competitive both on the domestic labor market and abroad. Professional tolerance is one of these qualities. We define professional tolerance of university students as the ability of an individual to handle situations when certain views, opinions, assessments, beliefs, or behavior of other people do not coincide with the opinions and assessments of this individual and remain tolerant and stable. This article reflects a part of the study on training professional tolerance skills of university students. The article explores the structure of professional tolerance and defines the criteria that help in measuring the development of professional tolerance skills of university students as they complete their university training program. The defined criteria were later used in a further experimental setting.

1. Introduction

The main goal of this paper is to examine the potential effectiveness of educational impact on students in the process of forming professional tolerance during their learning process at the university.

Let us note here that the concept of "professional tolerance" is a complex and multi-level notion that has two major dimensions - stability and reconcilability. Stability is described as a sequential and predictable set of actions, when an individual is insensitive to that or another factor and demonstrates self-control. Reconcilability characterizes the attitude of individuals or groups toward each other. Meanwhile, one of the main mechanisms for the manifestation of tolerance as reconcilability is empathy, the ability of the individual to empathize.

Training of professional tolerance skills among future specialists in the process of their university education is understood as a set of actions organized and managed by the instructor that lead to their personal development, helps them form an ability to overcome challenges and show reconcilability when interacting with different people.

The structure of students' formation of professional tolerance in the process of their university education includes:

- a set of instructional objectives that reflect the inner structure of the quality being trained (intellectual and cognitive learning, development of motivation and will, emotions, feelings and behaviors);
- educational activities of the instructor who coordinates his or her efforts with other teaching professionals;
- purposeful activity of students in independent learning in accordance with his or her understanding of an ideal personality of a modern-day specialist who demonstrates professional tolerance;
- a system of socio-psychological conditions within the education process, in which the student carries out his or her academic activities.

While considering the possibility of assessing the effectiveness of teaching university students professional tolerance skills, we followed the existing idea found in the educational and psychological literature on the possibility of quantitative evaluation of a particular pedagogical phenomenon.

2. Problem Statement

The philosophical foundation of the criteria is constituted by the following premises. As a human being perceives and comes to understand processes, events and objects, human studies their various properties that point to the form and substance of said objects, processes and events. A systematic approach to studying things around us states that any subject matter of concrete scientific analysis is a part of a wider system of events in the environment (Pozdeeva, Trostinskaya, Evseeva, & Ivanova, 2017). This system has the properties that include the attributes of the elements it consists of. This system, in turn, is a part of a more general system with its own complex attributes, etc. That is, specific properties (attributes that are viewed as criteria) that characterize the different sides of that or another

object, event or process are included in the properties (attributes, criteria) that belong to objects, events and properties of a higher class.

The diverse picture of the world around us is represented in our minds not as a sum of identical objects, but as a multitude of objects, processes and events with various properties. Also, each event has not one, but several properties, and therefore possesses not one, but many different characteristics. These properties include general and specific attributes (characteristics). The specific properties of the event are known as indicators (Ponomareva, 2009; Subetto & Selezneva, 2001). The indicators make it possible to detect those or other events among the multitude of other events.

The attributes (indicators) are revealed as manifestations of the object's essence in its relation to other objects. The specific attributes (indicators) that are used to define, weigh and assess objects or events are known as criteria.

Therefore, we can say that a criterion is a category that reflects specific attributes (indicators) of objects, events and processes and serves the function of relating these to each other for the purpose of assessment or classification.

In their turn, the attributes of objects, events and processes can be changed, acquired and lost. Therefore, one of the requirements in the selection of criteria for assessing the studied events is their permanence and stability.

We must remember that the routine, the habitual perception of the attributes of objects, events and processes can be superficial, which does not make it possible to disclose their essence. Nevertheless, while the relationship between the event and its essence is logical, the level of significance of various events can be different. Usually, the event and its essence are not identical.

To study some object or event more deeply, various properties of such objects or events must be studied in their many interrelationships.

The above fully applies to events and processes in education, including the process of teaching students professional tolerance skills.

3. Research Questions

When the essential features of such phenomena as the shaping and formation of professional tolerance are identified, described and categorized, they (such features) can be considered criteria for assessing these phenomena.

4. Purpose of the Study

4.1 To define the criteria for the effectiveness of the skill-forming process in the training of university students;

4.2 To define the criteria for the effective formation of professional tolerance skills of university students.

5. Research Methods

The choice of methods was determined by the specific research questions and included general theoretical methods such as analysis, synthesis, analogy, comparison, generalization, classification and systematization.

6. Findings

In order to define the criteria for formation of professional tolerance skills of students, we need to define the main objective attributes and indicators of substance. One such general indicator is the effectiveness of the training process.

In educational literature, the notion of effectiveness is defined as efficacy and delivery of practical results, the ability to achieve the goal with minimal investment of efforts, means and time, successful academic performance (Kharlamova, 2012; Zakharova & Krasnoschokov, 2016). This refers to the quality of educational influences (the ratio of the real quality of the teaching effort to the maximum effectiveness achievable in a particular situation), and the degree of the maximally of the results achieved (the ratio of actual results to the maximum possible results under given conditions). The practical result is expressed in the attitude towards learning.

In order to define the specific features that reflect the qualitative side of teaching efforts, we studied the experience of achieving teaching goals of more than 30 college instructors and analyzed the theoretical conclusions made by researchers today (Almazova, Khalyapina, & Popova, 2016; Gershunskij, 2002; Orekhov, 2007).

The characteristic features of the qualitatively effective teaching influence in the process of teaching students include:

- a clear definition of formative and summative goals of teaching, and a definition of the main aspect of the teaching process at every stage;
- a systematic approach to organizing the teaching process;
- consistency in the teacher's actions, reliance on the student's achievements and what is personally significant for him or her;
- coordination of actions with other teachers;
- consideration of the individual attributes of all students in the educational process;
- an optimal combination of methods and approaches to teaching students, their correspondence to the educational goals being set;
- carrying out control measures: an objective assessment and consideration of the results in students' learning activities and their behavior;
- introducing the necessary corrections into management practices of the teaching process. The degree of expression of these parameters was operationalized in a Lickert-type scale of assessment of the quality of educational influence on the students: "rarely = 2", "sometimes = 3", "often = 4", "frequently=5".

The formation of professional tolerance skills of students is reflected in their attitude toward learning, other students and teachers, and is manifested in:

- increased stability during instruction, when students are faced with the tasks based on the objective necessity of self-regulation, their moral justification;
- showing empathy towards instructors, other students;
- readiness for interaction in the process of reaching the goals;
- showing tolerance towards other students' behaviors and opinions;
- satisfaction with the learning process;
- good academic results.

The degree of these parameters expression was assessed using the Lickert-type scale of professional tolerance skill assessment: "rarely = 2", "sometimes = 3", "often = 4", "frequently=5".

Current academic literature on psychology and education recognizes the possibility of quantitative assessment of that or other pedagogical phenomenon (Akopova & Chernyavskaya, 2014; Almazova, Eremin, & Rubtsova, 2016). This assessment is provided in relative indicators - points and determines the degree of correspondence between the level achieved in practice as compared to the ideal level.

For the quantitative assessment of the teaching process, I used the well-known method of the effectiveness coefficient. This variable was defined as an arithmetic mean between the achieved level of teaching quality with the theoretical maximum of development of professional tolerance skills.

This component is assessed as being satisfactory, good, or excellent if the quality of such activities corresponds to this level.

The methodology for assessing professional tolerance skills of students in terms of quantitative and qualitative characteristics includes: selection of corresponding experts; assessment of each of the teaching quality parameters and each facet of the attitude towards learning activities on a five-point scale by each of the experts, and calculation of the mean values for each of the said parameters. Next, an arithmetic mean is calculated for all the criteria in the entire group for each of the measurements.

After each measurement of the sample, the results are compared to the initial perception of the students' level of tolerance, which makes it possible to see the dynamics of ongoing changes.

Mean values of 4.6 or more are rated as high effectiveness, from 3.6 to 4.6 (inclusive) - average effectiveness, from 2.6 to 3.6 (inclusive) - low effectiveness, and less than 2.6 - unsatisfactory effectiveness.

The qualitative characteristics of assessing the effectiveness of teaching professional tolerance skills can be defined as follows:

High levels: fully expressed high-level characteristics of influence on the students during their learning process; students are highly stable and ready to interact in the process of achieving instructional goals; they reliably demonstrate empathy, reconcilability, satisfaction with the learning process, excellent learning results.

Moderate levels: insignificant errors in educational influence on students during their learning of foreign languages: students are empathetic, tolerant, stable and ready for interaction in the process of achieving instructional goals; they are relatively highly satisfied with the learning process and demonstrate high learning results.

Low levels: significant errors in educational influence on students during their learning process: students are not sufficiently ready for interaction in the process of achieving instructional goals; they demonstrate low satisfaction and show little stability while willing to do so, low situation adaptability and empathy, low learning results.

Unsatisfactory levels: instructors do not wish (or are unable) to exert any educational influence on the students; students demonstrate a low degree of stability and do not wish to express it; they are rarely empathetic and are not ready for interaction in the process of solving problems; they are not satisfied with the learning process and show poor learning results.

7. Conclusion

Based on the above, it appears that the system of criteria and indicators as shown in this study comprises a necessary instrument that allows one to assess the process of teaching students professional tolerance skills during their university training program.

At the same time, we must bear in mind that the objectiveness of applying various criteria can never be absolute as the human being and his or her activities are much more complex than any description thereof.

One of the main questions that need to be answered in order to make the teaching process most effective relates to assessing the dynamics of the changes that take place in the teaching process during the students' time at the university.

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