UDC 159.923.2:159.9

Professional and teaching activities under technical universities teachers interpretation



Marina Suriakova

Candidate of Psychological Sciences, associate professor Associate Professor of department of Engineering Pedagogics National Metallurgical Academy of Ukraine E-mail: suryakova_m@mail.ru

Abstract

The phenomenon of interpretation as the general ability of the individual is investigated in the article. The main function of interpretation is the realization of man's own standpoint and opinion in regard to any phenomenon. The interpretation is also conductive to the development of man's attitude to oneself. A particular challenge for adult is the development of attitudes to his own professional activity, the profession in general, opinion of oneself as a specialist.

Results of empirical research of professional and teaching activities interpretation by teachers of technical universities are presented. It was found that teachers of engineering and natural sciences interpret the teaching profession as important for development of society, youth, certain economic branches, scientific thought. It was revealed that the teaching profession is first of all intended to the scientist in teachers' image. The basic standpoints of professional teachers were determined: professional of technical industry and, only then, professional teacher.

Key words: INTERPRETATION, UNDERSTANDING, OPINION, ATTITUDE, ABILITY

Statement of scientific problem

Development of own opinion, the personal ground of individual, need for opinion, ability to form and explicate it are the main problems, which are considered by interpretation psychology. Due to interpretation of any phenomenon, the personality achieves the certainty of own standpoint, ideas and life in general. Interpretation takes place as a process of understanding and reconsideration by the subject of reality in order to form the attitude to the world and to one-

self.

Sometimes, the personality has a task to develop the attitude to his/her professional activity on the basis of its understanding, determination of a certain value and personal meaning. Among the factors determining professional efficiency of any specialist, the interpretation of personal professional activity plays significant role. Professional activity of the teacher in the system of higher education requires special work of personality consciousness concerning determination of teacher role and place in professional field, and also determination of personal meaning of his/her profession and professional position.

Changes in modern Ukrainian system of the higher education cause the necessity of teachers investigation of interpretation of features of relevant relations, which take place in a broad context, that is system "profession - society" and system "personality - profession". The study of self-interpretation of technical universities teachers has earned the special attention.

Analysis of recent research and publications

Problems of understanding and interpretation were developed by representatives of philosophical and psychological science: M.M. Bakhtin, E.K. Bystrytskyi, O.D. Bozhovych, R.O. Budagov, S.O. Vasyliev, N.B. Viatkina, P.P. Haidenko, D.P. Horskyi, S.S. Husiev, T.M. Dridze, V.V. Znakov, E.V. Ilienkov, S.B. Krymskyi, V.G. Kuznetsov, V.O. Labunska, V.M. Meizerskyi, Yu.I. Pushkarov, G.I. Ruzavin, O.M. Slavska, Yu.O. Sorokin, O.V. Chebucheva and other. Cognitive-linguistic aspect of the interpretation is presented in works of V.Z. Demiankov, M.M. Boldirev, N.V. Kondratenko and other

Research of interpretation using hermeneutical approach of psychology is presented in works of V.V. Andrievska, N.P. Busygina, M.S. Huseltseva, O.V. Zazymko, O.O. Zaretska, Z.S. Karpenko, I.V. Koshova, N.F. Lytovchenko, T.M. Tytarenko, N.V. Chepeleva, O.M. Shilovska, L.P. Yakovenko and other.

The certain problemss devoted to education psychology, problems of the personality in professional field, research of professional consciousness and self-consciousness of the subject of activity are considered in works of O.Yu. Artemieva, S.V. Vaskovska, Yu.G. Viatkin, O.F. Bondarenko, M.Yu. Varban, O.V. Drobot, Ye.I. Isaiev, S.G. Kosoretskyi, N.O. Kucherovska, O.V. Moskalenko, A.G. Samoilova, V.I. Slobodchykov, D.O. Leontiev, L.M. Mitina, D.V. Ronzin, O.Ye. Sapohova, I.I. Chesnokova, Yu.M. Shvalb, N.F. Shevchenko.

Article **objective** is to investigate the features of

interpretation of professional and pedagogical activity by technical universities teachers under the conditions of modern educational system.

Statement of the main material of research

Interpretation in psychology is defined by researchers as a combination of intellectual, emotional and conceptual processes taking place under the influence of motivation of the subject, personality and relations, which were formed earlier. Interpretation allows the personality (as the interpretation subject) to find out significant things in texts, events, people, phenomena by intellectual analytical-synthetical process and consciousness activity; it is shown by determination of qualitative subject matter of this significance.

Achievement of personality standpoint determination is considered as the general function of interpretation in scientific literature. At the level of consciousness, such certainty takes place as special result of interpretation - personal opinion. Clearness of thought is conductive to achievement of common purpose by the personality - self-confidence and confidence in life. The personality is forced to rely constantly on personal opinion in case of solution of vital tasks, decision-making, position determination. The opinion exists in the form of idea; this is always own thought of the subject. Dynamics, changeableness, contradictory of reality, continuous change of personality individual relations with it, generation of the new purposes and ambitions require continuous work of consciousness and mentality, understanding, reconsideration, that is interpretation.

During interpretation, the subject creates own composition, which is formed of various arbitrarily selected data. Analogies, associations, facts from different spheres of life, personal experience and experience of other people, any information can be such data; this determines the interpretative ideal construct of the personality. In the interpretation, the subject understands the reality for creation of his/her own relations with the world [9].

Interpretation is also understood as process and procedure of meaning-making. Activity approach considers conceptual structures of the personality as the mechanisms of internal regulation of activity providing regulation of subject activity according to specific conceptual logic, logic of vital necessity [8]. Conceptual reality can be not only "read", that is interpreted as ready, social induced and culturally embodied sense, but also "ascribed", that is internally constituted by individual valuable and conceptual consciousness. But in scientific works, it is determined that interpretation cannot be reduced to a sense

problem, because psychological interpretation is not sense itself, but those relations by which it is formed, the way how they are transformed, then expressed and shown for another subject [1].

Interpretation is more psychological, than understanding, but also is more connected with those principles and contexts, in which it is carried out by the subject. N. V. Kondratenko notes the special characteristic of interpretation - its contextuality. The researcher draws attention to that fact that interpretation assumes knowledge of the world, its individual manifestations and communications. That is in order to interpret, the person must operate with large volume of information, conduct theoretical generalizations, consider object of interpretation in a wide sociocultural context, etc. [5, p. 44].

Determining actually psychological aspect of interpretation, A.N. Slavska defines it as work of consciousness of the subject, personality. Such work of consciousness is interpretation, where personally induced activity is carried out. Interpretation is process of understanding and reconsideration of events, relations and behavior of people, their features, life, actually oneself by the subject. Interpretation is understood as attribution of information, text, its values to the constructs of consciousness and life in general by the subject, "management" in its relation with objective reality. At the same time, interpretation is defined as development of own attitude to the thing, which is conceived, and not just its passive "consideration", taking into account and expression of this attitude [8].

Personal nature of interpretation is shown by the fact that it is obtained by own efforts of the personality, and also it is result of work of mentality and consciousness. The defining role of the personality in interpretive process is also emphasized by Yu.I. Push-karov as the personality finds out subjectively significant moments in the thing, which is interpreted, and forms personal attitude at the same time [7].

The authorship appears in the interpretation; that is the subject determines the standpoint of one, who interprets what exactly provides a selection of such point of view concerning the phenomenon, object. This position allows obtaining of meaningfulness and clearness. Authorship of interpretation is also embodied in a selection of living space of the personality, determination of own position, selection of way of behavior that is related to consciousness processes, the main of which is self-interpretations.

Interpretation of professional and pedagogical activity takes place in the field of professional consciousness of the personality. The professional consciousness is the generalized reflection of a certain

area of objective reality, specified sphere of professional activity and oneself as subject of activity by the personality. It is presented in the form of system of the personal meanings, which are in numerous connections and relations [10].

N. F. Shevchenko defines the professional consciousness as psychological formation, where professional values, scientific-theoretical knowledge, programs of professional actions, and also knowledge of the person about oneself as the representative of certain profession are integrated. Developed professional consciousness is the main factor of high-quality professional activity. Meanings and senses are the core of professional consciousness. The content of meanings and senses, and also nature of connections and relations between them is dictated by the essence of subject and purposes of professional activity [11, p. 66-67]. The consciousness of the professional is area of existence of the major conditions for control, assessment and coordination of its activity.

Possibly, interpretation as professional activity of the subject could be defined as professional interpretation.

Interpretative certainty is reached also through understanding of the purpose of modern education, which can be understood from different standpoints, by the teacher. So, the approach of determination of the educational purpose "by the consumer" is possible; that is caused by formulated social and economic orders. In that case, quality of professional education is defined as high if its results conform to requirements, which are advanced by practice. The purpose from the standpoint of "recipient" is based on personal interests of one, who is taught. Education is considered as mean not so much of transfer of knowledge, abilities, and skills, as of development of the personality. At that, the personality is understood as the subject of free creative activity. Such approach assumes the attitude of the person to own development as to value. And quality of professional education can be defined as development level of personality ability to self-fulfillment in work. Therefore, for interpretation of own professional and pedagogical activity, the teacher must realize the approach and positions, by which he/she fulfills the educational purpose.

Research of professional interpretation assumes determination of its separate components. From our standpoint, professional interpretation can consist of certain components: interpretation of profession in social and economic context; interpretation of professional activity in the context of personal meaning; interpretation of oneself as subject of professional and pedagogical activity; interpretation of own prospect

in professional field. Studying of each emphasized aspect, establishment of level of their understanding must lead to discovery of originality source of teacher professional interpretation.

Researchers of professional formation of the personality consider professional values, work motives, satisfaction with professional work in interrelation with social and objective reality. Certainty of the personality according to professional activity is achieved through awareness of person importance for others and actually for oneself. Understanding, or rather degree and adequacy of subject understanding of objectively specified social and technical reality, his/her role as specialist and personality capable to development and self-control, is a basis of the attitude to own professional activity and oneself as its subject [4]. Analyzing subjective activity of the modern man, scientists emphasize that the subject is a factor of the development, changes, and transformations of objective circumstances according to personality [3].

Interpretation of professional and pedagogical activity of teachers of technical universities possesses some differences; this is due to features of contents of the offered educational subjects. Quite often, we can meet teachers of natural, technical, engineering disciplines with a standpoint of physicist, mathematician, metallurgist, mechanic, specialist in electronics, information technologies, etc. The problem is that though teachers have steady certainty of their professional activity, they interpret it not in the pedagogical field, but in a narrow framework of the certain scientific or production sphere. Naturally, such

professional interpretation deforms the subject matter of pedagogical profession, and must be transformed by reconsideration and reinterpretation.

Revealing of interpretation features of personal meanings of profession, oneself as subject of professional and pedagogical activity, personal professional development and determination of general meaning of profession by teachers of technical disciplines became a subject of our research.

Selection of research consisted of 57 teachers of different specialties, age and professional experience from technical universities of Dnipropetrovsk. Researches were conducted in a format of increase of psychological and pedagogical qualification of teachers during 2013-2015. We have selected the technique of "Incomplete sentences" (author's development) for studying of interpretation features of professional and pedagogical activity by teachers of higher education institutions. The sentences are directed on detection of interpretations features: general meaning of profession; personal sense of profession; professional consciousness; prospects of personal development in a profession. High-quality data processing was carried out by means of the content analysis.

The studied teachers interpreted general meaning of profession from different standpoints, namely, profession for oneself, profession for the sake of other people, profession for the sake of a certain branch, and also uncertainty concerning the contents and value of profession. The obtained data are shown in Table 1.

Table 1. Interpretation of a teaching profession in a social and economic context

Category of interpretation	Expression
	To teach and learn how to analyze, model, predict, make decisions; to continue to improve personal knowledge;
	to learn new things and get experience; to study and
	discover new things; to improve oneself; to know and understand subject matter of physical processes and to
	impart the knowledge; in order to open something new for oneself; development of oneself and other people.
	To teach students how to think correctly; to teach students of the bases to technological processes; to teach and bring up; to bring the knowledge to students, to teach new, interesting things, to impart desire to study, learn the new things; in order to make people educated; for complex teaching of students; in order to provide high-quality education; in order to provide a certain branch of economy with highly qualified specialists; to induce students to seek to gain knowledge; to provide with the necessary information; to bring up the worthy citizen, the

	decent person, the professional; to prepare students for the solution of mathematical tasks; to explain to students a subject matter of problems; to teach students how to develop professionally; development of society; to bring up the younger generation; to teach students in a quality manner; in order to teach how to study.
Profession for the sake of a certain industry	To find out new technologies of steel obtaining; scientific work; to develop the latest technologies, to impart experience; the chemistry is life.
Approximate, uncertain understanding of a profession	To change the world; to be useful for others; to order a view of life; to help young people to orient in space and time; to try to teach that I know; the practice requires professionals; to force students to want to get knowledge; to facilitate the self-fulfillment for students; to provide an impetus for getting of knowledge in the future; to create all-round people; to listen to other people and to be able to help them.

Data, which were obtained during research of pedagogical profession general meaning interpretation, point at teachers quite adequate interpretation of their profession. The vast majority of answers of the teachers under investigation provide the profession with meaning "education of others", "development of others", "teaching of others". So, they interpret a pedagogical profession as necessary for development of society, youth, certain economic branches, scientific thought. From our point of view, such interpretation of a profession must determine a professional teacher standpoint, which would satisfy modern inquiries of education.

From our standpoint, interpretation of a pedagogical profession as first of all intended for the specialist does not correspond to reality. It is to be recalled that in modern educational field, the teacher must hold a position of the performer of educational service for the main customer, which is the state and society, or a student. Quite unspecific, generalized interpretation of professional activity also is not conductive to interpretation of an adequate view of the teacher.

Study of professional activity interpretation in the context of personal sense has revealed several variants of its formulation containing in Table 2.

Table 2. Interpretation of professional activity in the context of personal sense

Category of interpretation	Expression
The professional sense consists in personal development	Qualification, every day something new; self-education, communication; opportunity to fulfil oneself as the teacher; to be settled in life, science and pedagogics; teaching and scientific activity; improvement; specialization in a certain area; a considerable part of the life, opportunity to approve oneself, be important; to improve the knowledge, to teach as much as possible students of my subject; sense, existence source; continuous teaching and studying; satisfactions of personal importance; opportunity to do favorite thing; development of oneself; mission, scientific activity; achievements of purpose, constant need to ideate; opportunity to be useful; communication; detailed knowledge of the subject; human growth for achievement of the purpose, to be the expert of a certain branch; implementation of capability, knowledge, abilities; self-fulfillment;

	introduction of the world of science and technology; new impressions, opportunity to learn the new things; self-affirmation, good orientation in narrow branch; way of self-expression and scientific activity; to be able to do something, to be useful, to learn something new; ability to communicate with people, to share experience, impetus of knowledge extension; knowledge and abilities by profession.
The professional sense consists in usefulness and status	To occupy a certain social niche; long-term sphere of activity; self-affirmation in society; income source; the worthy member of society, brings benefit; the day not for nothing.
Emotional evaluation of profession	Satisfactions; always brings pleasure; interesting activity; important part of life, one of key components; integral part of life; part of life; important element of productive life, is hard to imagine happy life without it; way of existence, satisfaction; daily work.
The professional sense consists in the help to others	To get understanding from students; to help youth during the difficult period, a basis of my life; to teach students to think, obtain new data, scientific activity, transfer of professional knowledge and experience; improvement of educational process.

There is an idea that exactly conceptual formations regulate the inner world of the personality and opens prospect of life journey. The sense is defined as the ratio binding the objective vital relations of the subject, the subject content of consciousness and obvious structure of its activity [10, p. 34]. Therefore, interpretation of personal professional activity via understanding of its sense and attitude to it must bring the personality to definiteness of a professional standpoint.

The studied teachers of higher education institutions mainly recognize personal sense of professional activity in personal development. Teachers connect both professional and personal development with intellectual efforts, professional communication, deepness of special knowledge, perceptions of new scientific and practical information. Professional improvement, self-fulfillment, satisfaction of needs, possibility to be useful, establishment in society should be the result of such development.

68

Also the positive emotional coloring of professional activity by teachers is interesting fact; as the emotional reaction is the faultless indicator, which indicates the real attitude of the person to any phenomenon. It should be pointed out that the research also provided the identification of teachers ideas of pedagogical activity difficulties including indifference, laziness of students, emotional pressure, necessity of emotional control, lack of time, necessity of individual approach etc. But in general, realistic ideas of difficulties of pedagogical work did not influence the positive emotional coloring of interpretation of teachers profession.

Research of self-interpretation of higher education institutions teachers as subjects of professional and pedagogical activity revealed some professional standpoints: the professional teacher, the professional of certain technical fields, and also uncertainty of standpoint; that is presented in Table 3.

Table 3. The teacher interpretation of oneself as a subject of professional and pedagogical activity

Category of interpretation	Expression
Professional teacher	Work with children; specialist in teaching;
	communication with people; teaching of
	mathematical information disciplines; teaching of
	chemistry; teaching of youth.

Professional of certain technical	Information technologies; behavioral assessment;
field	technical knowledge; treatment of metals;
	government control; information science;
	management of projects; finance; mathematics;
	continuous casting of steel; technical science;
	treatment of metals by pressure; economies;
	computer facilities and system programming;
	management; in the field of programming;
	electronics; accounting and audit, mathematics
	and numerical methods; treatment of metals by
	pressure and plastic deformation; information
	technologies.
Uncertainty	I did not ask myself; I am not a professional yet; I
	try to be professional.

One of assumptions of our research was due to specific idea of teachers of engineering, natural, mathematical disciplines of professional self-interpretation. The obtained data revealed that the vast majority of technical universities teachers are more often identified as the specialist of certain scientific or production branch, than the pedagogical sphere. Such self-interpretation differs a little from idea of teachers concerning definition of a general meaning of peda-

gogical profession. From our standpoint, the relation "subject - profession - specialty" must be reconsidered, reinterpreted for the purpose of their specification and internal coordination.

Teachers of technical universities associate prospects of professional development with various aspects of professional life: professional and personal achievements, and also with social and economic effect (Table 4).

Table 4. Interpretation of teachers of their prospect in professional field

Category of interpretation	Expression
Positive prospects for professional growth	Self-improvement; opportunity to communicate with different people; achievements of high scientific level; broad coverage of knowledge; intellectual growth; self-understanding; self-fulfillment; implementation of ideas; awareness of profession; scientific work, getting of new knowledge; intellectual development, good feeling; new experience and impetus for further development; achievements of scientific heights, improvement of ability to teach and bring up; opportunity to improve the knowledge; natural development, result of persistent work, purposeful work; extension of an outlook, professional growth; confirmation of professional knowledge; achievement of the purpose; professionalism recognition.
Professional development as self-affirmation	Increases opportunities, self-affirmation; is not the main, but prestigious; success; scientific degree; is not the main but desirable for the status; has no essential value; increase of authority and trust; the state of being relevant; earnings are higher; growth of the income; status in science; recognition of professional community; upward move in career; growth of responsibility; establishment in life, confidence in the future; the status in science; opportunity to prove something to oneself and others; to change an edu-

	cation system; receiving an academic degree, necessary component of profession; establishment in society; way of the establishment and self-assessment; professional communications, success.
Declaration of possibility of professional growth	Important and necessary; important element of professional development; on the second place after a family; does not matter; increase in amount of work; necessity of permanent employment.

The analysis of the obtained data testifies that teachers of higher education institutions carry out interpretation of further professional development, so to say, in two directions. On the one hand, personal professional progress is understood as accumulation of professional experience, intellectual development, high level of professionalism; this provides activity satisfaction. On the other hand, teachers do not forget about "secondary" derivative, which is peculiar to scientific achievements and receiving of academic degree, and provides recognition in professional society.

Thus, the results obtained during research allow us to claim that interpretation of the professional and pedagogical activity by teachers of technical universities has certain distinctive features.

Conclusions and prospects of further investigation

Thus, research of interpretation of personal professional and pedagogical activity by teachers of higher education institutions has proved reasonability and necessity of studying of their understanding of the teaching work content, its value in society, attitude to it and determination of personal sense. It was proved that in the course of interpretation, the subject of professional activity has an opportunity to determine a professional standpoint and form personal opinion. The standpoint, which must be formed by the personality in professional field, is determined by its ability to interpret personal profession in the context of personal meanings and in wide social and economic context.

Professional interpretation can deepen by development of necessity for interpretative activity; it is due to understanding of responsibility for professional life by personality through development of mental abilities and the valuable and semantic sphere of the personality by means of implementation of numerous interpretations and reinterpretations. Further researches suppose determination of conditions of development of personality ability to analyze the personal interpretation by means of development of its reflectivity.

References

- 1. Demyankov V.Z. (1994) Cognitive linguistics as a kind of interpretive approach. *Voprosy yazykoznaniya*. No 4.
- 2. Dyachenko M.I. *Psihologiya vysshej shkoly* [Psychology of higher school] Minsk, Harvest, 2006. 416 p.
- 3. Zeer E.F. *Psihologiya professiy* [Psychology of professions]. Moscow, Akademicheskij Proekt, 2003. 244 p.
- 4. Ivanova E.M. *Psihologiya professional'noy deyatel'nosti* [Psychology of professional activity]. Moscow, PER Se, 2006. 382 p.
- 5. Kondratenko N. (2004) Organization of semantic field of text: text and interpretative content. *Zbirnyk naukovyh prats' z filosofii ta filologii*. Vol. 6.
- Kurliand Z.N., Khmeliuk R.I., Semenova A.V. Pedahohika vyshchoi shkoly. [Pedagogy of higher education]. 2nd edition, Kyiv, Znannia, 2005. 399 p.
- 7. Pushkarev Y. I. *Lichnost' kak subyekt adaptatsii i subyekt interpretaysii: sistemno-germenevticheskiy pokhod k izucheniyu lichnosti.* [Personality as a subject of adaptation and interpretation of the subject: system-hermeneutic approach to the study of personality]. Belgorod, Belgorod. 2012. 208 p.
- 8. Slavskaya A.N. *Lichnost' kak subyekt interpretatatsii* [Personality as a subject of interpretation]. Dubna, Feniks+, 2002. 240 p.
- 9. Chepeleva N.V. Vplyv interpretatsiinykh protsesiv na osobystisne funktsionuvann'a ta rozvytok osobystosti. Rozuminn'a ta interpretatsiya zhyttevoho dosvidu yak chynnyk rozvytku osobystosti. [Effect of interpretative processes personal performance and personal development. Understanding and interpretation of life experience as a factor of personal development: Monograph]. Kirovohrad, Imeks-LTD, 2013.
- 10. Shevchenko N.F. (2013) The personal meaning in the structure of individual activi-

ty sense of form. Materials of 1st International Scientific Conference «Kognityvni ta emotsiino-povedinkovi faktory povnotsinnoho funktsionuvann'a l'udyny: kul'turno-istorichnii pidkhid» ["Cognitive, emotional and behavioral factors full functioning of personality: cultural-historical approach"]. Kharkiv, Kharkiv National Pedagogical University,

- p.p. 33-35.
- 11. Shevchenko N.F. Stanovlennia profesiinoi svidomosti praktichnykh psiholohiv u proysesi fahovoi pidhotovky. [Formation of professional consciousness of psychologists in the process of professional training: Monograph]. Kyiv, Milenium, 2005. 298 p.



The contents and structure of discipline "Computer document science" for future teaching engineers

Viktoriia Tkachuk

Assistant of Engineering Pedagogy and Language Training Department Kryvyi Rih National University

Iryna Lanova

Senior lectorof Engineering Pedagogy and Language Training Department Kryvyi Rih National University

Abstract

Currently, meeting the labor market demands for professionals of documents system organization and information activity in productive and non-productive spheres, at the enterprises of different branches, at scientific and research institutes, state archives, educational institutions of all accreditation levels and other establishments of different types of ownership is significantly relevant inasmuch as the success of business activity and development of business subject determine the information awareness. The modern economy is based on the principles, which are maintained by computer technologies. Control of documentation and information processes is one of the leading types of activity, and therefore, the discipline "Computer document science" became advanced and necessary for students of the direction 6.010104 "Professional education (by a profile)".

Keywords: COMPUTER DOCUMENT SCIENCE, ELECTRONIC DOCUMENT, DOCUMENT FLOW, TEACHING ENGINEER