The article presents result of the empirical study of the development of professional consciousness of the future teachers in the process of professional education. The current state of teacher’s professional consciousness problem has been researched and perspectives for its solution have been shown. Study of the professional consciousness of practicing teachers and in the process of their educational preparation belongs to soundly declared, but not enough realized area of research. The choice of psychosemantic method as the research method of future teachers’ professional consciousness has been substantiated. Dynamics of the individual values of professional space concepts and ways of classifying the world objects have been represented. These factors have proved to be important indicators of the professional consciousness development of teachers in the process of educational preparation. The results show that individual meanings of professional space in students’ consciousness are determined by the assessment factor domination. Among students of the fourth course (education level “Bachelor”) and the first and the second courses (education level “Master”) we have fixed a tendency towards depriving the evaluative thinking and a tendency of professional consciousness gradual filling with subjective sense – the process of consciousness development. Analysis of the world objects classification ways allowed to say that high percentage of the students of magistracy and baccalaureate has a quite pronounced professional orientation of semantics. Data obtained due to the methods, allowed us to make conclusion about certain levels of professional consciousness of the students getting “Bachelor” and “Master” degrees. The level of professional consciousness of the first-year and the third-year bachelor students can be defined as critical (middle), and of the fourth-year bachelor and master students – as necessary (satisfactory).

Keywords: teacher professional consciousness, psychosemantic approach, individual values, classification of the world objects, level of the professional consciousness development.
**Problem identification.** In today’s socio-cultural and economic situation in Ukraine, society needs a teacher who would be able to build the professional activities in accordance with the values of the personality. There is a need to go beyond the limits of technological understanding of professional occupation and study the professional consciousness of a specialist. Study of the professional consciousness of practicing teachers and in the process of their educational preparation belongs to soundly declared, but not enough realized area of research. At the same time, teacher profession is crucial in education and social development.

**Analysis of the recent researches and publications.** Ukrainian and foreign psychologists and educators (Akopov G.V., 2010; Guslyakova N.I., 2010; Isayev Ye.I., Kosaretskiy S.G. & Slobodchikov V.I., 2000; Tsokur O.S., 1998; Shevchenko N.F., 2018; Shevchenko N.F. & Chepishko O.I., 2015; Omelchenko M., 2019) have studied psychological conditions and mechanisms of professional consciousness formation. Different aspects of professional consciousness of the pedagogues and the future teachers, in particular self-consciousness and the identity of a teacher (Boreham N. & Gray P., 2005; Bravo P., Magnoler P. & Conde-Jiménez J., 2018; Cattley G., 2007; Sachs J., 2001; Zembylas M., 2003), have been investigated. Despite the presented wide range of studies, the problem of the specifics of professional consciousness development of the teachers at certain stages of higher education is paid not much attention in psychological and pedagogical writings. Empirical study of this issue will create the basis for design of practice-focused measures for purposive development of professional consciousness of the future teachers in higher education.

**The objective of this paper** is to present results of the empirical research of the features of professional consciousness development of the future teachers in the process of their professional education.

**Presentation of the main material.** During the professional preparation at the university, in the result of interaction with a specific object of labor and academic orientation, there intervenes a process of semantization in consciousness of the future professionals. This process is characterized by the construction of new understanding of the subjective experience of the world objects (Artem’yeva Ye.YU., 1999; Artem’yeva Ye.YU. & Vyatkin Yu.G., 1986; Artem’yeva Ye.YU. & Khanina I.B., 1984). Research of the Ukrainian scientists (Kucherovskaya N.A., 2007; Shevchenko N.F., 2005) attest that semantic features are indicators of perception of the profession. This fact led to the choice of psychosemantic approach as the main approach for studying the features of professional consciousness development of the future teachers in the stage of their educational preparation.

The following psychodiagnostic instruments were used: 12-scale modified method of semantic differential (C. Osgood) which aims to study the dynamics of individual values of professional space concepts and visual semantic differential method (Artem’yeva Ye.YU., 1999) to explore ways of classifying the world objects.
Research of the professional consciousness of the future teachers using the psychosemantic methods was carried out on the basis of Zaporizhzhya National University, National Pedagogical Dragomanov University and Kryvyi Rih National University. The sample of respondents consisted of the 1st-4th course students getting bachelor’s degree and the 1st-2nd course students studying at master’s degree. Specialties of the students were the following: “Philology” (Ukrainian language and literature, Russian language and literature, English language and literature, German language and literature) and “History”. The total number of respondents was 300 persons.

Analysis of the results obtained by the first method revealed the dynamics of individual values of 10 professional space concepts in consciousness of the students of the magistracy and baccalaureate. These 10 stimulus concepts characterize a teacher personality and the content of the teaching activity: “Knowledge”; “Vocation”; “Authority”; “Thinking”; “Self-actualization”; “Pupil”; “Interaction”; “Speech”; “Control”; “Reflection”.

There was detected a strong numerical gap between high levels of “evaluation” factor and significantly lower scores on factors of “potency” and “activity» of the first-year students of baccalaureate. This can be explained by superficial professional notions of the freshmen for whom teaching activity isn’t still a component of their own activity. For this reason, the respondents could not consciously determine for themselves the “potency” or “activity” of professional concepts. So, the first-year students mostly gave priority to exterior assessing of a teacher individual and activity.

Among students of the third course of baccalaureate there was traced an overall rates recession of individual values on «evaluation”, “potency” and “activity” factors. This fact characterizes the crisis period at this stage of education. With making quasi-professional activities, students are facing with own inability to effective usage of their professional knowledge and skills in practice. They felt unwillingness to solve pedagogical situations. These problems led to the self-esteem recession of personal and professional capacities, to the disappointment in learning and in the chosen specialty.

Among students of the fourth course of baccalaureate and the 1st-2nd courses of magistracy comparing with other students, we fixed a gradual increasing of scores on “potency” and “activity” factors by all testees. This indicates a tendency towards depriving the evaluative thinking and indicates a tendency of professional consciousness gradual filling with subjective sense – the process of its development. At the same time, statistical analysis did not reveal significant differences between the rates of individual values concepts among respondents from the fourth and the fifth courses at any factor. This means that knowledge got in the final stage of getting higher education did not significantly contribute to the professional consciousness development. We explained this fact by the presence of internal conflict, which led to inhibition of students’ professional activity. The conflict characterizes by the collision of senses derived in carrying out academic activities and meanings that are formed in the educational and professional activities.
Now we can consider the analysis of the results obtained by the visual semantic differential method by O. Artem'yeva (1999), in which respondents had to give descriptions to each of 8 stimulus pictures. Their descriptions were subsumed to one of the five groups based on E. Klimov classification of occupations, which clearly indicates on the objective world and coincides with the classification of basic displacing realities.

Analysis of the world objects classification ways allowed to say that high percentage of the students of magistracy and baccalaureate has a quite pronounced professional orientation of semantics. Besides, we observed a positive dynamics of the level of descriptions professional orientation that coincides with the process of profession acquiring. Compared with the results of the first-year and the third-year students of baccalaureate (38.03 % and 22.54 % of socio-oriented descriptions of the total number of descriptions), the students of magistracy demonstrated growing number of descriptions that correspond to professional orientation “man-man” (41.27 % and 46.49 % of socio-oriented descriptions of the total number of descriptions). However, at the same time, conducted statistical analysis showed the absence of any dynamic changes in this indicator. It means that, despite the prevailing choice of the reality of social facilities and interpersonal relationships as distinctive replacing reality, there is no professional consciousness development of the 1st-2nd-year students getting master’s degree.

Thus, data obtained due to the methods, allowed us to make conclusion about certain levels of professional consciousness of the students at bachelor’s and master’s levels. For dividing these developmental levels, we identified 3 criteria. In selecting the criteria, we relied on the psychosemantic approach (consciousness study) (Artem’yeva Ye.YU. & Khanina I.B., 1984), research of N. Shevchenko on the structure of professional consciousness (Shevchenko N.F., 2005), our own theoretical ideas concerning the developmental stages of professional consciousness of the future teachers at certain stages of education (based on N. Chepeleva scientific works (Chepeleva N.V., 1999)).

So, the above-mentioned criteria are: positive dynamics of the individual values of professional space concepts that manifests in the rate index of the factor loadings (factors of “evaluation”, “potency” and “activity”); importance of a certain professional space concept that manifests in the vector length by the totality of “evaluation”, “potency” and “activity” factors; prevailing choice of the reality of social facilities and interpersonal relationships that manifests in the representation of the descriptions corresponding to professional orientation “man-man”.

To obtain statistically reliable results on the characteristics of professional consciousness development of the future teachers, we have found it necessary to determine standard indicators of the developmental levels. That is why we converted the above criteria results into a single system of evaluation, using a four-rate standard scale. This scale is widely used by Ukrainian scientists in evaluating professional preparation of pedagogical specialties students, in evaluating some professional activities quality and the competence of the educators. For this we defined standard rates for each of 3 criteria – average values and standard deviations, – which corresponded to the four levels of the professional
consciousness development: optimal (high), necessary (satisfactory), critical (middle) and inadmissible (low).

Consider results of the first criterion. For “evaluation” factor, we have calculated the following limits of the professional consciousness developmental levels: 0-4.1 – inadmissible (low); 4.2-7.8 – critical (middle); 7.9-11.5 – necessary (satisfactory); 11.6-12 – optimal (high) level of development. Accordingly, 75% of students’ rates of magistracy and baccalaureate were within the middle (critical) and 25% – within the satisfactory (necessary) level of development. Herewith, rates of the first-year bachelor students on two indexes – “Speech” and “Thinking” – were in the interval of the satisfactory developmental level, but of the third-year students – only on indicator “Speech”.

Students of the fourth course of baccalaureate demonstrated 2 stimulus concepts - “Knowledge” and Speech”, while students of the 1-2 course of magistracy - six stimulus concepts (“Knowledge”, “Thinking”, “Self-actualization”, “Pupil”, “Interaction”, “Speech”) in the frame of the satisfactory (necessary) level of development. We did not register a single rate within the low and high levels of development.

For “potency” factor, limits of the professional consciousness developmental levels we have set as follows: 0-1.6 – inadmissible (low); 1.7-5.5 – critical (middle); 5.6-9.5 – necessary (satisfactory); 9.6-12 – optimal (high) level of development. It was determined that 62.5% of the respondents rates from all educational levels were within the middle (critical) and 37.5% – within the satisfactory (necessary) level of development. Indexes within the inadmissible and optimal levels were absent.

The first-year students getting bachelor degree demonstrated satisfactory level of development of consciousness on six scales (“Knowledge”, “Vocation”, “Authority”, “Thinking”, “Self-actualization”, “Interaction”), but the third-year students – only on two (“Authority” and “Self-actualization”). Herewith the highest rates of the first-year and the third-year students of baccalaureate were registered at the stimulus concepts that characterize a teacher personality. It can be supposed that for these students who have just finished school and remember experience of relationships with the teachers, it is easier to assess teacher’s personal peculiarities as opposed to the teaching activity. The above may not witness about satisfactory level of professional consciousness at this stage of education.

Students of the fourth course of baccalaureate showed four (“Knowledge”, “Authority”, “Self-actualization”, “Interaction”) while students of the 1-2 courses getting master’s degree demonstrated three stimulus concepts (“Self-actualization”, “Interaction”, “Reflection”) within the satisfactory (necessary) level of development. The highest results of the students from the fourth year of baccalaureate and the 1st-2nd years of magistracy, in contrast to the results of the 1st-3rd years of baccalaureate, were allocated quite evenly because of scoping both personal peculiarities and teaching activity assessments. We explain this fact by inclusion of senior individuals to the professional reality in the framework of quasi-professional and educational and professional activities.
For “activity” factor we have calculated the following limits of the professional consciousness development: 0-2.4 – inadmissible (low) level; 2.5-6.4 – critical (middle) level; 6.5-10.5 – necessary (satisfactory) level; 10.6-12 – optimal (high) level. Accordingly, 67.5% of students’ rates from all courses were within the middle (critical) and 32.5% – within the satisfactory (necessary) levels of development in the absence of rates, corresponding to the low and high levels.

Among the first-year students of bachelor’s degree satisfactory level of development was registered for three stimuli (“Authority”, “Pupil”, “Speech”), but among students of the third course – in none of the cases. The fourth-year undergraduate students and the 1st-2nd - year students of magistracy had equal results: their valuations of the same five concepts of the professional space (“Authority”, “Thinking”, “Self-actualization”, “Pupil”, “Speech”) were in the range of satisfactory developmental level.

Thus, only part of the first-year bachelor students’ results reached the necessary level of development and most of them were located within the critical. Almost all results of the third-year respondents placed within the critical level of development. The highest results were presented among the students of the 1-2 courses of magistracy. But at the same time it’s necessary to take into consideration that statistical difference between the students of the fourth course of baccalaureate and the students of the 1-2 courses of magistracy was absent. This fact lets us say about the same level of professional consciousness development of the students of these courses. Thus, the majority of rates of the fourth-year undergraduate students and the 1st-2nd - year respondents studying for master’s degree reached the necessary level of development.

Consider the results of the second criterion – the vector length by the totality of “evaluation”, “potency” and “activity” factors, where the limits of developmental levels were as follows: 0-7.7 – inadmissible (low); 7.8-11.6 – critical (middle); 11.7-15.4 – necessary (satisfactory); 15.5-20.8 – optimal (high).

Among the students of the first course of baccalaureate, the vector length of the three stimulus concepts (“Vocation”, “Authority”, “Thinking”) was within the satisfactory level of development and the other rates corresponded to the middle level. Among the students of the third course the vector length was in the critical level diapason, except the stimulus rate “Self-actualization”, which corresponded to the satisfactory level and the stimulus rate “Control”, which was low (inadmissible).

Most of the fourth-year students’ rates were also within the middle level of development, except rates of the stimuli “Authority”, “Self-actualization” and “Thinking”, where the vector length corresponded to the satisfactory level. Respondents from the magistracy course got the highest results. Their vectors length in the five stimulus concepts (“Thinking”, “Self-actualization”, “Pupil”, “Interaction”, “Speech”) matched the necessary level of development and the remaining rates – the middle.

Consider the results of the third criterion – representation of the descriptions that correspond to the “man-man” professional orientation. For this criterion, limits
of developmental levels were as follows: 0-3.5 – inadmissible (low); 3.6-5.1 – critical (middle); 5.2-6.7 – necessary (satisfactory); 6.8-20 – optimal (high).

We calculated average rates (average number of the socio-oriented descriptions) for each course of respondents in order to compare these rates with a standard scale of the professional consciousness developmental level. The average rate of the first-year bachelor respondents was 5.14 points and was subsumed into the middle level. For the students of the third course the average rate was lower – 4.58 points, – but also pertained to the middle level of development. The rate of the fourth-year students belonged to boundaries of the satisfactory level (5.24 points). The average result of the master students appeared to be the highest – 5.55 points, – but also was in diapason of the satisfactory level. However, together with the given data we should notice that only the fourth-year students and magistracy students showed the dominance of the descriptions that correspond to the “man-man” professional orientation over the other types of descriptions.

Thus, based on the third criterion, we can say that the fourth-year bachelor students and master students, unlike other respondents, clearly demonstrate a prevailing choice of the reality of social facilities and interpersonal relationships as the distinctive replacing reality. This may indicate a higher level of professional consciousness of the senior students as compared with the other ones.

After analyzing the results of the defined criteria we can say that prevalent number of rates of the first-year and the third-year bachelor students is within the critical level of development, but nevertheless some rates reach the satisfactory level boundaries. Most answers of the fourth-year students and students from magistracy is within the satisfactory (necessary) level of development. Rates corresponding to the high level were absent, and corresponding to the low level – slightly, only for the bachelor students of the third course.

Thus, the level of professional consciousness of the first-year and the third-year bachelor students can be defined as critical (middle), and of the fourth-year bachelor and master students – as necessary (satisfactory). Identifying the levels of professional consciousness it is necessary to emphasize the lack of statistical difference between indexes of the fourth-year students from baccalaureate and from magistracy for both methods. Obviously, despite the expansion, deepening and supplementing the competences acquired on the first stage of getting higher education, there is no significant increase in the level of the master course students’ professional consciousness. This fact contrasts with the positive changes that take place in the professional consciousness development of the bachelor course students, and which can be clearly seen in large numerical gaps between the students’ rates from the first to the fourth courses. The above mentioned information points to the necessity of developing and implementing of practice-focused measures for purposive development of professional consciousness of the future teachers. The measures should be implemented from the fourth year studying at the university in order to ensure efficiency of the further professional training and activities.

**Conclusion.** The article presents the results of the empirical research of peculiarities of professional consciousness development of the future teachers.
Dynamics of the indicators of professional consciousness development of the future teachers in the process of educational preparation – individual values of professional space concepts and ways of classifying the world objects – has been shown. The criteria and the levels of professional consciousness development of the students getting the higher education level “Bachelor” and “Master” have been identified.

The prospects of the solution of the noted scientific problem we foresee in inventing and implementing the program of psychological and pedagogical support of professional consciousness development of the future teachers in the system of higher education.

References


