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# Harmonization of pedagogical theory and methodological knowledge as an important constituent of qualitative professional training of future teachers

# Harmonizacja (łączenie) wiedzy pedagogicznej i metodycznej jako ważny warunek jakościowego kształcenia zawodowego przyszłych nauczycieli

#### Abstract

The article deals with key issues of teacher training in the context of harmonizing methodological and pedagogical knowledge. In the process of training future teachers, it is important to unite knowledge in various disciplines in order to study material in complex and from different angles and to apply the gained knowledge in practice successfully. It is noted that one needs to care about building necessary knowledge, skills and abilities not only in major disciplines but also in a range of psychological and pedagogical courses for qualitative training of future teachers who will be successful in their profession.

**Keywords**: professional training, methodological training, pedagogical knowledge, teacher practice.

#### Streszczenie

W artykule zostały przeanalizowane główne problemy związane z przygotowaniem przyszłych nauczycieli w kontekście harmonizacji wiedzy metodycznej i pedagogicznej. W procesie kształcenia przyszłych nauczycieli ważne jest połączenie w całość wiedzy z różnych przedmiotów nauczania w celu jednolitego i wielostronnego poznania materiału i skutecznego wykorzystania otrzymanej wiedzy w praktyce. Zwrócono uwagę na to, że aby jakościowo przygotować przyszłych nauczycieli, którzy będą mogli skutecznie wykonywać funkcje zawodowe, trzeba zadbać o kształtowanie u nich niezbędnej wiedzy oraz umiejętności nie tylko z dyscyplin przedmiotu, ale również z szeregu przedmiotów psychologiczno-pedagogicznych.

**Slowa kluczowe**: kształcenie zawodowe, kształcenie metodyczne, wiedza pedagogiczna, praktyka pedagogiczna.

#### Introduction

Modern world integration processes have caused the necessity of radical changes in the system of professional education, the peculiarity of which is the focus on the development of humanitarian resources of society, creating such a social organizational structure that would contribute to individual and group learning and motivation by various factors and incentives. Nowadays one can already speak about the emergence of new educational culture ("learning through changes, changes because of learning") that promotes the process of forming a qualified professional<sup>1</sup>. An important condition for modernization of educational system and its quality assurance is training future teachers as well-qualified pedagogues, who are able to think creatively, to explore, to analyze, to find solutions to complicated and non-standard tasks in the process of educating and bringing up a new generation. Therefore, harmonization of psychological, pedagogical and methodological knowledge in the process of professional training of future teachers becomes of great importance as grounds for quality assurance.

Despite the changes in education modernization in a contemporary system of teacher training, one can trace a number of problems. Firstly, these are mostly frontal and group forms of work as well as prevalence of subject preparation above psychological and the pedagogical one. Psychological and pedagogical preparation is usually only formally added to the special (subject) one, is not the principle one and does not cover the entire content of teacher training. Therefore, a systematic vision of pedagogical reality is not formed during the process of professional training while professional activity itself loses its integrity and splits into a number of functional actions, which are very slightly interconnected. In addition, many subjects lead to students being overloaded, and content incoherence of subjects creates the fragmentation and mosaic structure of the content of education. Technocratic orientation in teacher training leads to the loss of humanistic essence and the role of culture creation of its content; it does not contribute to student's individual and creative comprehension of professional performance. Hence, current issues of training a modern professional are the unity of theoretical and practical training, educational and scientific activity of students and professors, which ensures multifaceted preparation of a pedagogue to professional activity<sup>2</sup>.

Considering mentioned above, one can outline a range of contradictions in a system of teacher training, such as:

- between the system of professional training and modern requirements for forming a future teacher a subject of pedagogical activity;
- between the level in the field of psychological and pedagogical sciences and their reflection in the content, forms, methods and means of teaching students;
- between the need to train the graduates with a high level of culture, creative potential, well-developed methodological way of thinking, prognostic skills and

<sup>&</sup>lt;sup>1</sup> Е.В. Данильчук, Методологические предпосылки и сущностные характеристики информационной культуры педагога, "Педагогика" 2003, № 1, с. 61.

<sup>&</sup>lt;sup>2</sup> О.М. Семеног, Професійна підготовка майбутніх учителів української мови і літератури: монографія, Суми 2005, с. 23.

- dominant orientation of methodological preparation to doing tasks according to a sample;
- between constantly changing requirements of a teacher practice to the level
  of pedagogical and professional teacher training and the ability of university
  graduates to adapt to modern challenges and conditions of life quickly and
  effectively, and to carry out pedagogical activity in the innovative mode.

The contradictions defined have actualized the problem of integration of methodological and pedagogical training of future teachers in the context of harmonizing knowledge as an important condition for qualitative training of future teachers.

#### Research methods

A range of methods was used during the research. The method of systematization was used for a complex vision of the defined problem and controversial issues. The logical method enabled a successive division of the research material into semantic fragments, such as providing the connection between the stages of covering the issue of integration of methodological, psychological and pedagogical training as important constituents of teacher training. The spiral model depicts gradual development of characteristics of the analyzed issue in research papers; definition of author's problem issues on this basis and summary of the outlined problem.

## **Results finding**

The point of view of the scholars R. Hurevych and A. Kolomiyets is significant for the research, as they consider that one of the key tasks of the process of teacher training is transforming a student into a professional teacher who is able to solve all the diverse tasks connected with teaching, educating and developing schoolchildren. The scholars note that such areas as integration, humanization, professional orientation and anesthetization should become the main ones in the educational process of a higher education institution. This means that lessons in each subject should be filled with interdisciplinary connections, consider each student's interests and skills, have a direct connection with the curriculum, and contain emotional moments (interesting historic facts, demonstration of works of art, audio and video tracks, etc.). Scholars emphasize an important role of a theoretical preparation in professional activity of a pedagogue, students' focus on a continuous professional development, self-improvement, disclosure of internal potential, and creativity; they also note that in order to form a feeling of responsibility for social development in the mind of a future teacher, the educational process in a higher education institution in general should be aimed not only at a teacher who knows the subject well,

but also at a teacher who is a humanist, shares core ideas of national and universal culture, and is a creative and curious individual. Only such a teacher can be a link to successful reformation of the system of education, expanding its social functions and social and cultural purpose in the society<sup>3</sup>.

In order to train qualitatively future teachers who will be able to apply the components of a methodological system in their professional activity successfully, one should care about building necessary knowledge, abilities and skills not only in their major subjects, but also in a number of psychological and pedagogical courses. We believe that the role of psychological and pedagogical disciplines, which include both traditional ones (didactics, theory of education, history of pedagogy, general psychology, pedagogical and developmental psychology) and comparative pedagogy, basics of pedagogical techniques, social psychology, culture of pedagogical interaction, etc.<sup>4</sup> should constantly increase in the process of teacher training on the grounds of competence-based and individual oriented approaches. It is also stated that the diversity of psychological and pedagogical disciplines justifies itself since a modern school requires professionals who are ready to work in non-standard conditions, apply innovative forms and methods of work, introduce advanced pedagogical experience into a teacher practice, develop oneself and improve constantly. As rightly observed by O. Piekhota<sup>5</sup>, "the peculiarity of teacher training from the point of view of their individuality consists in the focus which is shifted from the external organization in the field of professional training to its 'internal image'. A future pedagogue is placed in the centre of such an approach as a subject of training and as a subject of individual professional growth while the training itself is carried out from the standpoint of development learning and formation of the pedagogue's individual and professional 'I-concept'".

In the process of teaching future teachers, it is of great importance to unite the knowledge from different disciplines with the aim of coherent and comprehensive study of the material and successful applying of the gained knowledge in practice. Alongside traditional approaches to teaching disciplines, it is essential to use innovative teaching techniques, which have a new impact on the traditional process of gaining knowledge, increase its effectiveness, and facilitate students' individual development. In particular, the scholar N. Tymoshchuk<sup>6</sup> considers such a form of teaching as a lecture, which requires studying the theory in correspondence with its practical application, to be still significant in teacher training. One should note

<sup>&</sup>lt;sup>3</sup> Р. Гуревич, А. Коломієць, *Неперервна освіта педагога: мотиваційні чинники* [w:] Ksztalcenie zawodowe: pedagogika i psychologia, Częstochowa-Kijów, t. IV, 2003, s. 80-81.

<sup>&</sup>lt;sup>4</sup> М.М. Фіцула, Вступ до педагогічної професії, Тернопіль 2007, с. 46.

<sup>&</sup>lt;sup>5</sup> Е.Н. Пехота, Индивидуальность учителя: теория и практика, Николаев 1996, с. 11.

<sup>&</sup>lt;sup>6</sup> Н.С. Тимощук, Інноваційні технології підготовки майбутнього педагога до особистісно орієнтованого виховання учнівської молоді. Вісник Житомирського державного ун-ту ім. I. Франка, 2005, Вип. 25, с. 131.

that a modern lecture undergoes a certain transformation, is modernized and meets students' requirements at fullest. The content of each lecture has to emphasize the issue of individual oriented learning clearly. With the aim of activating student's mental activity one needs to define the structure of every lecture, style of teaching, make up questions and research tasks very precisely. Sometimes it happens that students and the lecturer perceive the same content of the material in a different way. In S. Podmazin's<sup>7</sup> opinion, students do not only listen to the lecturer's story but also constantly cooperate with him/her in a dialogue, express their thoughts, share their understanding of the content, discuss the issues suggested by their groupmates, and with the help of their teacher select the content confirmed by scientific knowledge. While delivering a lecture the teacher may ask certain question, i.e. "What do you know about it?" / "Which characteristics/features can you define (name, enumerate, etc.)?" etc. There are no right/wrong answers during the discussion. The teacher's task is not to make, but convince students of taking the content he/she suggests from the standpoint of scientific knowledge. Then such a lecture may be called individual oriented. When delivering it, the teacher not only expresses his/her empathy towards the students, but they together perform equal activity concerning searching and selecting the knowledge of scientific content which is to be gained. Under such conditions, the knowledge which is to be gained becomes personally substantial. S. Podmazin<sup>8</sup> singles out main requirements to the individual oriented lecture:

- orientation on students' personal achievements;
- skills formation by students on their own; knowledge gaining and its practical application;
- orientation on the learning process using the method of cooperation;
- teacher's being wisely demanding and friendly towards students;
- pedagogical ethics and psychological tact.

We find T. Woodward's suggestion<sup>9</sup> about organizing a lecture as a kind of work with the groups of students or, according to the author, "buzz groups" quite interesting. At such a lecture, work is arranged in the following way:

- 1. Students are seated in such a way so they can easily organize "buzz groups" of two or six while working. The teacher chooses a stop signal and shows it to the students. After finishing the first part of the lecture, the teacher suggests students be divided into "buzz groups" and quickly discuss key moments of information they heard. When seeing the stop signal, students stop their work.
- 2. The teacher starts the second part of the lecture, after that he/she stops again and gives a task to "buzz groups". During their work, students can discuss

 $<sup>^7</sup>$  С.И. Подмазин, *Личностно-ориентированное образование: социально-философское исследование*, Запорожье 2000, с. 22.

<sup>8</sup> Ibidem, c. 134.

<sup>&</sup>lt;sup>9</sup> T. Woodward, *Ways of Training*, Recipes for Teacher, ESSCS: Longman, Group UK, 1995, pp. 24–25.

important and complicated issues of the lecture, which helps to understand, realize and remember them. The work can be arranged in various ways: questions and comments on the delivered lecture or outlining its advantages and disadvantages. During the "silent buzzing" pairs of students exchange their notes after each part of the lecture, giving other students a possibility to look at them and share their thoughts afterwards.

3. On finishing work, the teacher takes students' notes and at the end of the lecture analyzes them pointing out incomprehensible and complicated issues of the teaching material that enables lecture detailing.

Such a method of delivering a lecture may be called innovative and promising since the participants of "buzz groups" get another opportunity to revise and grasp the content of the lecture, ask questions and make comments, which develops their memory and oral communication skills as well as self-confidence and flexibility in using the material. It is worth mentioning that such lecture material is interesting and useful for students and enables qualitative teacher training. In addition, organization of future teachers' studies on the grounds of an individual oriented approach contributes to better knowledge acquisition in psychological and pedagogical disciplines, increases their professional knowledge and methodological preparation.

Methodological training of future teachers involves solving such tasks as mastering knowledge, skills, and abilities in methodological activity aimed at developing pedagogical skills, exploring pedagogical proficiency of creative teachers and best practices of pedagogical teams, etc. Studying general disciplines, professionally oriented disciplines and disciplines chosen by students, the content of which promotes the formation of methodological knowledge, skills, and abilities, makes grounds for methodological training of future teachers.

The results of the scientific research prove that skills formation of methodological activity of future teachers involves the following tasks: stimulation of professional orientation and positive motivation for pedagogical activity; practical and methodological work aimed at developing pedagogical skills. Formation of methodological skills is encouraged by the analysis of video lessons and their notes, the description of the main idea of the experience of seminars, making the characteristics of the methodological component of the lesson, making conclusions about possibilities of better methodological practices by practicing teachers, visiting lessons delivered by other teachers, organizing students' teacher practice at schools for them to learn about pedagogical mastership of experienced teachers. Students' belief in the necessity to develop their own individual and methodological creativity alongside using others' experience is extremely important. Indeed, lesson plans in numerous methodology handbooks and unique recipes should be creatively implemented, that is they need comprehension and extra work taking into account class peculiarities, level of its preparation, and features of the pedagogue's individual style.

At the same time, while teaching such methodological disciplines as "Math Teaching Methodology" or "IT Teaching Methodology" during seminars and practical classes the teacher should create problem situations, add elements of creative research, dispute, discussion, brainstorm, gallery method, define research tasks, work on the sources together with students, etc. Future teachers' participation in preparing and delivering seminar classes promotes effective formation of skills and desires to "see oneself and stand up for oneself as an individual", to affirm "positive personal matter" and "individually developing personal dimension" by communicating with the teacher as equals<sup>10</sup>. Under the conditions of a new didactic model that is based on communication oriented learning, activity-based approach and interaction, contemporary teacher training is intended to prepare a pedagogue-facilitator who is able to arrange cooperation; develops pupils' critical thinking; forms the ability to explain one's thought and change it if it is mistaken, to notice mistakes in words by others and to build right self-esteem. Moreover, the teacher has to combine psychological knowledge, understanding of various situations during the pedagogical process, and the ability to cope with problems and take right decisions<sup>11</sup>.

We agree with the opinion of the scholar L. Zienia<sup>12</sup>, who notices that the process of productive performance (which is the system of professional training of future teachers) necessarily finishes with the reflective stage. For instance, S. Honcharenko<sup>13</sup> suggests using problem situations (the situations where a subject or polysubject has to find and apply new knowledge or ways of action) to implement the reflective approach. These situations can really exist and be formulated by the teacher or students. In addition, an open dialogue approach that defines the interaction between two subjects and increases the degree of freedom of the participants of the educational process should form the basis for teacher training. This enables the transformation of the teacher's superposition and the student's subordinated position into personally equal ones. Such a transformation is connected with the fact that the teacher does not just teach and educate, but actualizes and stimulates a student to general and professional growth, and creates conditions for his/her self-improvement<sup>14</sup>.

A teacher practice makes a considerable part in professional training of future teachers since it reflects the harmonious combination of methodological,

<sup>&</sup>lt;sup>10</sup> Н.С. Тимощук, *Інноваційні технології підготовки майбутнього педагога до особистісно орієнтованого виховання учнівської молоді*, Вісник Житомирського державного ун-ту ім. І. Франка, 2005, Вип. 25, с. 130–131.

<sup>&</sup>lt;sup>11</sup> A. Chown, Beyond competences, "British Journal of In-service Education" 1994, vol. 20, p. 38.

<sup>&</sup>lt;sup>12</sup> Л.Я. Зєня, Теоретико-методичні засади підготовки майбутніх учителів до навчання іноземних мов учнів профільної школи: монографія, Горлівка 2011, с. 143.

<sup>13</sup> С.У. Гончаренко, Український педагогічний словник, Київ 1997, с. 271.

<sup>&</sup>lt;sup>14</sup> М.Г. Чобітько, *Педагогічна освіта: особистісний підхід, Педагогічний процес: теорія і практика*, 2003, Вип. 1, с. 127–128.

psychological and pedagogical knowledge gained by students. E. Herasymenko<sup>15</sup> considers that "a traditional set of 'knowledge and skills' should be supplemented with the graduate's readiness to implement them in the professional activity". During the practice, students – future teachers – independently prepare and deliver lessons as well as conduct organizational and educational work with pupils. Summing up their practice, students make a report including the analysis of all the types of pedagogical activity. A higher education institution defines the terms of the practice being guided by the standard, which implies its six-week or four-week period. To our mind, such a period of a teacher practice is extremely short and does not provide students with an opportunity to master necessary skills and abilities. Moreover, during the practice, students are regularly involved into delivering lessons while extra-curricular work is mostly left behind. Judging from experience, students who have a teaching practice usually conduct one formal educational event that, unfortunately, neither they, nor pupils benefit from. Therefore, we consider a constant practice starting from the third year of studies to be more efficient. This would give a possibility to solve another problem of today: preventing the disappointment with the profession. It is true that many students, having mastered theoretical courses without using practical knowledge, lose their wish to make a teaching career and start searching for those fields where their knowledge can be applied. The statistics proves the unfavourable tendency of percentage decrease of teachers under 40, while the percentage of teachers who are 41–50 years old is quite stable, and the percentage of teachers who are 51–55 years old has increased<sup>16</sup>. This state of things can be also explained by a lack of job opportunities for graduates of pedagogical higher educational institutions that is connected with the fact that teachers of the retirement age are unwilling to lose their jobs, which definitely does not motivate a contemporary student to look for employment at school.

In the circumstances of a traditional practice, many students lose their interest in a chosen pedagogical profession. They do not fully realize the meaning of educational and scientific work and practice at school for their professional growth. This happens because the students' activity is performed without taking into account the context of a real life. Gaps in methodological, psychological and pedagogical knowledge impede effective pedagogical activities. It often happens that a good command of a subject is combined with a weak technique of its teaching and arranging educational work with pupils. The reason for that is a lack of complex and systematic perception of future pedagogical activity during teacher training. As a result, pedagogical activity is seen as separate, though connected in some way, and isolated processes. Considering that, one finds it essential to search for

<sup>15</sup> Е.Н. Герасименко, Пути совершенствования профессиональной подготовки будущих учителей начальных классов в педагогических коледжах, "Начальная школа" 2008, № 9, с. 69.

<sup>16</sup> Л. Пуховська, Професія вчителя у світовому освітньому просторі: статистичні характеристики, "Шлях освіти" 2004, № 1, с. 19.

new models of organizing an educational process in a higher education institution intended to activate learning and cognitive activities of students, particularly from the perspective of harmonizing psychological, pedagogical and methodological knowledge of teacher training.

## Conclusions and perspective for future research

In the process of teaching training an important task should be solved, that is to teach to build an optimal system of training, which is based not on copying (imitating), but on the knowledge of system regularities considering various conditions. This means that one needs to prepare a teacher who is able to think and work creatively and explore a teaching and educational process. Research knowledge and skills are essential for a teacher as a means of creative activity; they help him progress, filter different recommendations and consider pros and cons before using various pedagogical innovations taking into account personal professional qualities and circumstances of professional activity.

In conclusion, we can state that harmonizing methodological and pedagogical knowledge of future teachers in the process of professional training will ensure its new quality. In particular, peculiar features of quality of professional training will be:

- openness to innovation in an educational process and content of teaching material;
- transition from considerable orientation to tasks involving imitation to orientation to productive theoretical and practical activity;
- equal (subject-subject) relationships between a teacher and a student aimed at development and cognition;
- keeping the principles of an individual oriented and active approach to students when the goal of teaching and educational work is self-study, self-education and self-realization;
- no limit of professionalism of future teachers and teachers and a natural requirement for professional growth of people who teach;
- promotion of building future professionals' responsibility for the whole society by a system of higher education<sup>17</sup>.

Further scientific researchers will be directed at studying the content, methods and techniques of professional training of future teachers in the context of ensuring its quality.

<sup>&</sup>lt;sup>17</sup> Г. Нестеренко, *Можливості особистості в контексті синергетичної моделі вищої освіти*, "Вища освіта України" 2004, № 1, с. 27.

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