



Diagnostics of Methodological Competence Development of Preschool Teachers

Lyudmila V. Aleksieienko-Lemovska^(✉)

National Pedagogical Dragomanov University, Kyiv, Ukraine
a.l-lem17@ukr.net

Abstract. The article is devoted to the problem of methodical competence development of preschool teachers. It requires diagnosis of the real level of this competence development. The relevance of the study is justified by the need to develop and implement a pedagogical model of methodical competence development of preschool teachers. Checking the effectiveness of the pedagogical model of methodical competence development of preschool teachers requires the development of a special diagnostic system to determine the level of methodical competence development of preschool teachers. Objective determination of the level in the context of the implemented diagnostic system can be understood by selecting a set of criteria and their indicators. Thus, the purpose of this article is to develop a diagnostic system for determining the level of methodical competence development of preschool teachers. The article describes the process of experimental diagnostics of methodical competence development of preschool teachers. On the basis of application of universal methods of scientific knowledge (analysis, synthesis, modeling, generalization) theoretical aspects of levels of pedagogical education, criteria and indicators of their definition are studied in the article. By means of theoretical methods (idealization, design) the system of criteria and indicators of methodical competence development of preschool teachers was developed. On the basis of the application of empirical methods (observation, testing, questioning, pedagogical diagnostics, pedagogical experiment) professionally significant qualities of teachers through the use of diagnostic tools are determined. The elements of novelty in the study are presented by the developed diagnostic tools, a system of criteria and indicators for determining the level of methodical competence development of preschool teachers and characteristics of each possible level (creative, productive, basic).

Keywords: Teacher of preschool education · Methodical competence · Competence approach · Method of formation of methodical competence · Pedagogical model · Pedagogical diagnostics · Levels · Criteria · Indicators

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1 Introduction

Analysis of the trends in the development of modern society allows us to talk about processes such as globalization, transformational and integration processes that characterize the domestic and world society at the turn of the century. These processes and their consequences require concerted action by the world community not only in the field of politics and economics, but also in the field of education.

The tendencies of society at economic, social, spiritual, scientific levels provoke the emergence of new priorities and stereotypes that have historically been formed and that are relevant at all times. Thus, the role of the teacher in the modern world is changing, the range of his personal responsibility is expanding. Modern teachers need to be able to work in a team, plan educational activities together, work in a virtual environment and open educational space, monitor and direct the development of children's individual success, organize project activities and participate in projects, provide professional advice to parents, integrate children with special needs. A teacher should be able to organize activities of children in an innovative educational environment. Within the framework of the modern educational paradigm, the goal of education is the development of personality, the disclosure and development of its inclinations.

Thus, today society needs, first of all, a competent teacher who is able to act effectively, solve standard and problematic tasks, has the technique of applying innovative educational technologies, the ability to build a subject-subject pedagogical interaction taking into account humanistic, personality-oriented, system-activity approaches. From the position of a competence-based approach, the level of education is determined by the ability to solve problems and professional tasks of varying complexity based on existing knowledge and experience.

So, in the system of professional readiness of a teacher, in particular, a specialist in the field of pre-school education, an important component is methodological competence.

Thus, this competence is one of the most important components teachers' professional activities in preschool educational institutions. Most modern scholars consider pedagogical methodological competence as mastering the system of knowledge and skills, taking into account individual qualities of a person. A number of researchers consider this competence in the sense of the teacher's readiness to conduct classes in the framework of educational process and to creative self-realization.

In the study, under this term we mean a multi-component system, including knowledge, skills, practical experience in the field of methodology, readiness and ability to effectively solve standard and problematic methodological tasks and the ability of the teacher to creative self-realization and continuous self-improvement.

The methodological competence of a teacher of preschool education is formed empirically or in the process of purposeful preparation and retraining in a higher educational institution, where the personality masters professional competencies. Increase in the level of formation of this competence involves the development and implementation of a pedagogical model for the development of methodological competence of pre-school teachers. The development of a truly effective pedagogical model requires the study of the real level of development of methodological competence of teachers of preschool education.

So, in a broad sense, the purpose of this study is to develop approaches for determining the state of methodical competence development of preschool teachers. More specifically, the goal of our research is represented by the development of a system of criteria and indicators for determining the level of formation of the methodological competence of preschool education teachers. For this purpose, according to methodology for the implementation of pedagogical diagnostics (Levchenko 2006), criteria and indicators were defined, development levels of methodical competence development of preschool teachers were characterized, and experimental diagnostics of the level of methodical competence development of preschool teachers were carried out.

2 Methodology

The methodological basis of the study was developed on the basis of taking into account the provisions of the competence-based, environmental, system-activity approaches. The implementation of the goals and objectives of the study involved referring to the following universal methods of scientific knowledge: analysis, synthesis, modeling, generalization; theoretical methods: idealization, design; empirical methods: observation, testing, questioning, pedagogical diagnostics, pedagogical experiment.

3 Results

Speaking about the problem of determining the level of methodical competence development of preschool teachers, it is necessary to clarify the meaning of the analyzed concept. In this study, the concept of “level” will be considered as the degree, magnitude of the development of a particular pedagogical phenomenon, the fact of its differentiation or classification (Babansky 1988). In pedagogical science, the level of formation of certain personal education is determined by a number of criteria as optimal samples for comparison with real phenomena (Akimova 2005).

In this study, the criterion, following Z.A. Mendubaeva, we will be considered as an ideal sample expressing the highest, most perfect level of the phenomenon being studied. By comparing with the criterion of real phenomena, it is possible to establish the degree of their conformity, approximation to the norm, the ideal (Mendubaeva 2012).

To determine the level of methodical competence development of preschool teachers, we selected the following objective (according to the classification criteria of AK Markova) (Markov 1990) criteria:

- motivational;
- cognitive;
- technological;
- reflexive (Zakharova 1998).

The choice of the motivational criterion is due to the presence of motivation for methodical work, abilities and readiness for the creative self-realization of the teacher in the methodological and pedagogical activity.

The choice of the cognitive criterion is due to the need to reflect in the professional activity of the educator the system level of functioning of methodological, methodical and research knowledge, the ability to update them in case of need.

The technological criterion was chosen based on the need for the teachers to develop professional and methodological skills and skills of the teacher in the field of methodology, ability to optimally combine the methods of professional pedagogical activity, their own effective professional experience of teachers' methodological work in preschool educational institutions.

The choice of the reflexive criterion is connected with the need to analyze one's own activities with the aim of self-improvement.

The state of development or the level of a criterion is fixed by indicators that represent phenomena or events by which one can judge the dynamics of a certain process (Semenova 2016). The use of indicators makes it possible to assess the quality and level of development of certain personal education (Mendubaeva 2012).

So, for each of the specified criteria, within the framework of the study, appropriate indicators were selected allowing to determine the correspondence of the level of formation of one or another personal education in the structure of the methodological competence of preschool education teachers.

Indicators of motivational criteria were:

- sustainable motivation and interest in methodical work;
- readiness for creative self-realization in methodical activity.
 - Indicators of cognitive criteria were:
 - awareness of the forms, methods, techniques of methodical work;
 - knowledge of modern technologies of methodical work in a preschool educational institution.

Indicators of technological criteria were:

- availability of professional and methodological skills;
- ability to optimal combination of methods of professional pedagogical activity.

Indicators of the reflexive criterion were:

- the level of development of methodical reflection;
- the ability to self-analysis and self-esteem.

Based on certain criteria and indicators, the levels of methodical competence development of preschool teachers are characterized:

- basic;
- productive;
- creative (Ivanov 2003).

The creative level of development of methodological competence was characterized by sustained motivation and interest in methodological work; readiness for creative self-realization in methodical activity; awareness of the forms, methods, techniques of methodical work; knowledge of modern technologies of methodical work in a preschool educational institution; the presence of professional and methodological skills; ability to optimal combination of methods of professional pedagogical activity; a sufficient level of development of methodical reflection; the ability to self-analyze and self-esteem.

Sustainable motivation and interest in methodological work, awareness of forms, methods, techniques of methodical work are characteristic of the productive level of development of methodical competence; knowledge of modern technologies of methodical work in a preschool educational institution; availability of professional and methodological skills; ability to self-analyze and self-esteem. At the same time, respondents of this level are not always ready for creative self-realization in methodological activities. The level of formation of methodical reflection in them was insufficient.

The basic level of development of methodological competence was inherent in teachers of pre-school educational institutions, who are knowledgeable with the forms, methods and techniques of methodological work; with modern technologies of methodical work in a preschool educational institution (Solomennikova 2007). Professional-methodical skills were formed. At the same time, their motivation and interest in the methodological work were fragmentary. They were not ready for creative self-realization in methodological activity, the optimal combination of methods of professional pedagogical activity, self-analysis, and self-assessment. The level of formation of methodical reflection was low.

On the basis of certain criteria, indicators and levels, primary diagnostics of the level of methodical competence development of preschool teachers took place.

The chronological framework of the primary diagnostic experiment: March-May 2018.

The respondents of the study: teachers of preschool education, combined into two groups: experimental (EG - 24 people) and control (CG - 18 people).

The study was conducted on the basis of the Transcarpathian Institute of Post-graduate Pedagogical Education.

The methodological basis of the study was the works of G.I. Zakharova, D.A. Ivanova, A.K. Markova, K.G. Mitrofanova, O.V. Sokolova, O.A. Solomennikova and other theorists of the competence approach.

Each of the indicators was tested using diagnostic examination methods.

Indicators of motivational criterion were investigated on the basis of application of the method of questioning. The quantitative results of the tasks of the motivational criterion are reflected in Table 1.

Table 1. Levels of methodological competence development in the framework of motivational criterion

Levels	1 task/%	1 task/%	General level/%
<i>Experimental group</i>			
Base	38.2	40.2	39.2
Productive	53.2	52.4	52.8
Creative	8.6	7.4	Eight
<i>Control group</i>			
Base	38,8	41.2	40
Productive	53	51.2	52.1
Creative	8.2	7,6	7.9

The indicators of the cognitive criterion were checked by the method of analyzing the abilities of teachers of preschool education to compile the basic methodological documentation, in particular, the plan of methodical work for the year, as well as by the method of the Technique “Modern technologies of methodical work”. The results of the analysis of teachers’ achievements according to this criterion are presented in Table 2.

Table 2. Levels of methodological competence development in the framework of the cognitive criterion

Levels	3 task/%	4 task/%	General level/%
<i>Experimental group</i>			
Base	39.4	42.6	41
Productive	52.4	50.6	51.5
Creative	8.2	6.8	7.5
<i>Control group</i>			
Base	40.2	43.2	41.7
Productive	51.4	50.2	50.8
Creative	8.4	6,6	7.5

Indicators of the technological criterion were tested on the basis of the application of the testing method and methodology of the “Creating and analyzing situations.” The quantitative results of the tasks of the technological criterion are shown in Table 3.

Table 3. Levels of methodological competence development in the framework of technological criteria

Levels	5 task/%	6 task/%	General level/%
<i>Experimental group</i>			
Base	44.8	46.4	45.6
Productive	48.8	47.8	48.3
Creative	6.4	5.8	6.1
<i>Control group</i>			
Base	45.4	46,8	46.1
Productive	48.4	47.6	48
Creative	6.2	5.6	5.9

Indicators of the reflexive criterion were determined on the basis of Methodology for determining the level of pedagogical reflection development O.V. Kalashnikova (1999), Methods for the study of self-assessment according to the method of Dembo-Rubinstein (modified by P.V. Yanshin) (Yanshin 2004). The quantitative results of the tasks of the reflexive criterion are shown in Table 4.

Table 4. Levels of development of methodological competence in the framework of the reflexive criterion

Levels	7 task/%	8 task/%	General level/%
<i>Experimental group</i>			
Base	48.8	47.4	48.1
Productive	47.6	48.8	48.2
Creative	3.6	3.8	3.7
<i>Control group</i>			
Base	48.4	47.8	48.1
Productive	48.2	48	48.1
Creative	3.4	4.2	3.8

The quantitative results of assignments for all criteria are shown in Table 5.

Table 5. Levels of methodical competence development of preschool teachers

Levels	Motivational criterion	Cognitive criterion	Technological criteria	Reflexive criterion	General level
<i>Experimental group</i>					
Base	39.2	41	45.6	48.1	43.5
Productive	52,8	51.5	48.3	48.2	50.2
Creative	Eight	7.5	6.1	3.7	6.3
<i>Control group</i>					
Base	40	41.7	46.1	48.1	44
Productive	52.1	50.8	48	48.1	50
Creative	7.9	7.5	5.9	3.8	6

4 Conclusions

In conclusion, we summarize that the article examines theoretical aspects of pedagogical education levels, criteria and indicators for their definition, develops a system of criteria and indicators for the level of methodical competence development of preschool teachers, as well as diagnostic tools for its assessment. Using empirical methods of scientific research, we determined and characterized the levels of professionally significant qualities of teachers (creative, productive, basic) through the use of the developed diagnostic tools.

Summarizing the above, we conclude that the analysis of the results of the initial diagnostic examination showed that the overwhelming majority of respondents recorded productive (50.2% in the experimental and 50% in the control group) and baseline (43.5% in the experimental and 44% in the control group) levels of methodical competence development. Only 6.3% of the respondents in the experimental and 6% in the control groups were at a creative level.

The results indicate the need for systematic and focused work on methodical competence development of preschool teachers, that is, the introduction of a pedagogical model of its formation, which will be the subject of further research; and implementation of re-diagnosis of the level of formation of the components of the analyzed competence of preschool teachers using the diagnostic tools developed and described in this article.

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